

PREVIEWS: 1:72 DRAGON WAGON ■ M1A2 SEP ■ CYBER T-34 ■ AND MORE...

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Converting Academy's
M60 Blazer into the
fearsome Magach

Model MILITARY INTERNATIONAL

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CAFFÈ ITALIANO

Uwe Henning describes how he built
his stunning 1:15 R/C Panther Ausf. A

SHERMAN DETAILS

Full size ref on the good old M4



LAID TO REST IN LIBYA

Mig Jimenez offers another in-depth painting and weathering guide

■ All the information you'll ever need to create the best military models... ■



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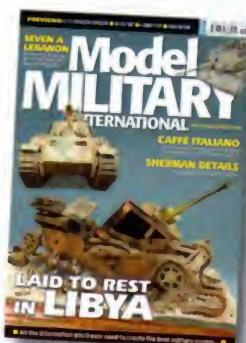
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Diary Dates...

October 13th

IPMS Glasgow will be holding their annual show at the Kelvin Hall International Sports Arena, Argyle Street, Glasgow G3 8AW, adjacent to the Transport Museum.
 Bruce Smith 0141 5632098

October 14th

IPMS Lincoln/Newark Model Club wish to announce their annual show to be held at 'The Grandstand', Southwell Racecourse, Nottinghamshire. Clubs, traders, open competition, refreshments, free parking and entry!
info@lincolnmodelclub.co.uk

October 14th

IPMS Ipswich/St Edmundsbury Scale Modellers wish to announce 'The East Anglian Modelling Show' to be held at the Maidenhall Sports Centre, Ipswich, Suffolk IP2 8NZ. There is ample free parking and refreshments will be available. Entry £2. Clubs are welcome to put on displays. Kelvin English 01473 657744 kelvin.english@virgin.net

October 20th

Gravesend Military Modelling Society will be holding their annual open day and competition at Chalk Parish Hall, Lower Higham Road, Chalk, Gravesend, Kent. Doors will open at 10.00am with local model clubs and a variety of traders in attendance as well as an open competition. www.gmms.org

For bookings please contact Jean Bickerstaff 01474 327003

November 10th / 11th

IPMS Scale Modelworld 2007 to be held at the Telford International Centre, incorporating the IPMS (UK) Annual Competition and the Trumpeter Competition.

November 18th

Scale Model Factory, the South-East Netherlands chapter of Twenot, the Dutch Armour Association will be holding "Military Scale Model Challenge 2007" in Eindhoven, Holland scalemodelfactory@hotmail.com
 Tel: +31 40 2487070 (after 7.30 pm)
 mobile: +32 474 654821 (daytime and in the evening)
www.everyoneweb.com/scalemodelfactory



CONGRATULATIONS



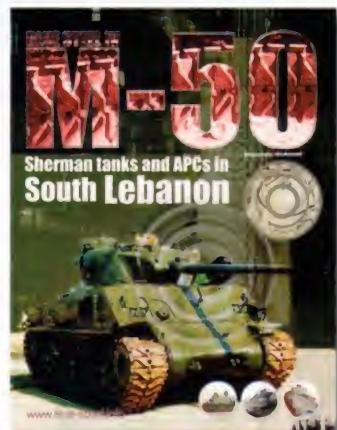
IMPACT CONTACT DETAILS

In Issue 17 we featured part one of Frank Helming's stunning 1:16 King Tiger and we mentioned the Chinese company 'Impacts' metal tracks. Impact are actually from Singapore and anyone interested in obtaining these superb tracks can contact Impact at the following address; email: elhhss@yahoo.com
 Address: No.24-12, Blk 44, Marine Crescent, Singapore 440044

M.C. (Mick) Bell. 1953-2007

It is with great sadness that we must inform everyone of the passing of Mick Bell. After a brave and courageous 8 year battle against cancer his body finally gave up the struggle on Wednesday 8th August at the tragically young age of 54. Despite serving for 20 years in the RAF, Mick's overriding interest was in military vehicles and his extraordinary skills and talents as a model maker and draughtsman put him at the very top of the hobby. Although a modest man, he was quite simply one of the hobby's "greats". After many years scratch building models, many of which won prizes in the MAFVA Nationals, Mick turned his hand to making master patterns for several well known manufacturers including Cromwell Models, BW Models, CSMC and Geisbers Models. Mick may be gone, but his skill and craftsmanship will live on in the models from these manufacturers as well as his plans. Those who knew him personally will always remember his ready smile, sense of humour and the Australian drover's hat he always wore. It was a great privilege to have known him and counted him as a friend. He will be sorely missed, but he rests peacefully at last. Our condolences and thoughts go out to his wife Coryn and children Tomas and Alex, both of whom he was extremely proud. Rest in Peace. Barry Wright & Paul Gandy.

Kudos goes to Jim Wechsler, who won best of show at this year's USA IPMS Nationals, held on 22-25 August at the Marriott Hotel, Anaheim, California. Jim built an incredible 43 different Shermans, all on individual display bases. It certainly goes to show not all Shermans have to be olive drab! Well done Jim.



NEW BLUE STEEL BOOK

We have just received details on the latest book in the Blue Steel series. This one is titled M-50 Sherman tanks and APCs in South Lebanon. Thanks to author Moustafa El-Assad's expert knowledge in the field of military operations in this troubled region, this one will undoubtedly be an invaluable reference for all those interested in the 'Super Sherman'. For further information please checkout - www.blue-steel.info and <http://blue-steel-books.blogspot.com/>



Ian McGonagle gives us the lowdown on Academy's all new 1:72 Dragon Wagon Tank Transporter.

THE TANK TAXI

Many moons ago I spent my pocket money and paper-round wages on Matchbox armour models, with a wide and varied selection to choose from, all moulded in tri-colour plastic, and the fact you could display them on your bedroom window sill gave them the edge over aircraft for me. Now the hobby has come to recognise that modellers still want to model their favourite subjects in a more manageable scale that can be displayed in large quantities and this has to be a good thing for the hobby, because just maybe it will get more young modellers involved.

Now that the mainstream manufacturers have returned to the small scale the floodgates have opened to give us a plethora of subject matter. The latest being Academy's Dragon Wagon and having recently finished the Tamiya 1:35 scale offering, the Editor passed this over for a preview of what's in the box.

Opening the large box exposes five olive green sprues, decal sheet and an A5 size twelve-page instruction booklet. My

sample came with no individual plastic bags protecting each of the sprues. Throughout the instructions you are shown a built and painted model to aid your construction, but either my eyes are getting worse or the photographs are too grainy and small to show any real detail. The decals look to be of good quality with minimal carrier film, but how they will react to being applied is another story.

The running gear (and there's a lot of it), is provided on two identical sprues, and includes all the wheels, in split rim fashion, that need to be removed, glued and sanded down carefully. The general detail on the wheels is good, but it would have been nice if the manufacturers markings had been included as the tyres are certainly large enough for the lettering to be visible. The main omission from the running gear is the drive chain that will be on full view when the tractor unit is completed, a shame but not insurmountable. I did like the detail of the two spades in the pioneer tool racks and the rear D ring mounts on the trailer.

The main structure sprue (A) has heavy sink marks in the surfaces that will show on the finished model, so get your filler out and try to dress out the marks in the corners of the trailer deck and the internal surfaces of the cab. While in the cab area, the thickness

of the window armour-plates is not far away from the thickness of the ones in Tamiya's 1:35 scale kit! so replacement is a must, either the etched brass people will come to the rescue or a sheet of 5 thou plastic card will be needed to replace the over-scale plates.

There are however a number of high points with the kit; the detail displayed on the foot plates for the winch assembly, the large shackle and guide pulley and the trailer running boards to name a few, but in some other areas the kit falls short; the exhaust stack, that is going to attract attention when finished with a rusting effect, is just a plain rod pointing skyward, the .50cal is moulded with no hand grips and the tractor unit winch and pulley is pretty sparse in the detail stakes to say the least.

I am of the opinion that plastic kit manufacturers have been pushing the technological boundaries, to produce a level of detail acceptable to us perfection hungry modellers, then Academy should strive to replicate the competition if not exceed it, but this kit is far from that goal. With approximately 200 parts this subject is a test of resolve with the passion to build it over coming the sheer effort.

It's great to see an M25 Dragon Wagon in small scale, although it's not exactly a tiny model even in 1:72! There are a few issues with the kit that have been highlighted in this preview, but nothing that can't be overcome.

This kit is not really a leap forward for the 72nd scale modeller, but the subject matter will make you forgive it for all the work you will have to put in to do it justice. ■





SEVEN A LEBANON

Norman Lim describes in detail how he converted Academy's M60 Blazer into the Magach 7A in Israeli service.

After the Yom Kippur War the IDF received a large number of M48, M60 and M60A1 tanks for those that were lost during the fight to survive. The name Magach, which is acronym for Merkavot Giborey Ha'milchama meaning Chariots of the War Heroes, is used to classify this category of tanks replacing the American designation Patton. From 1978 to 1985 Israel received about 300 M60A3 and 150 M48A5 from the US.

Many of these new tanks received their baptism of fire

during the 1982 invasion of Southern Lebanon (Operation Peace for Galilee). All Pattons were fielded with the new explosive reactive armour (ERA) developed by German scientist Dr. Manfred Held and a 60mm Soltam mortar for self contained close-in indirect-fire capability along with an extra Browning .30 cal machine gun for the loader. The M60 and M60A1 fitted with ERA are called Magach 6 and Magach 6A respectively.

The Magachs have been continually upgraded throughout

their service life until culminating in the current 7A and 7C. The Magach 7A I have chosen to model entered service in 1989 and had new found capability to defend itself against KE (kinetic energy penetrator) rounds; an improvement over the Blazer system which could only provide protection against CE (chemical energy) threats.

The Magach 7A, modelled in this article, is an upgraded M60 with a new passive armour suite that gives better protection than earlier reactive ones. These

included the Glacis, the turret and the side skirts. The Magach 7A also had new fire controls systems and a Vidco thermal sleeve added for the 105mm gun. The Urdan tracks and a new AVDS-1790-5A engine replacing old AVDS-1790-2C. These gives the Magach a power boost of more than 150 horsepower. Thus, allowing the heavier Magach similar mobility even after the hefty armour upgrading. It is unclear to me if the transmissions were upgraded too to handle the higher stress levels.

CONSTRUCTION

First, I built the lower hull and running gear of the Academy M60 before test fitting the resin parts. As the kit has been sitting around for 2 to 3 years, there was some warping had occurred which required attention. I wrote to Mr. Lee of Legend and he was kind enough to replace some of the parts for me. However, he warned that such an occurrence as not uncommon with resin kits.

The quality of details found on this kit is no less than amazing. Moulding quality is first rate with the exception of only 2 or 3 parts suffering from a couple of air bubbles. This is easily solved with Tamiya epoxy putty and some liquid cement.

TURRET TROUBLES

The new resin turret parts supplied in the Legend conversion didn't fit particularly well together, some serious cutting and filling was needed before I could attain a good fit. The next problem, was after all this surgery the turret sat too low on the turret ring, thereby, making it impossible for the turret to rotate.

The turret ring was therefore re-shaped and built up from the rear to provide a slope so that the turret sat evenly and horizontal. This was done with several thin layers of 0.5mm Tamiya plastic card so that each additional layer was small increment to get the fit just right. Then the gaps are filled in with Tamiya putty and left to shrink and cure for a week before being sanded smooth.

BASKET WEAVING

The turret basket is huge on the Magach and Legend have done an admirable job of replicating it in photo etch and brass wire. However the wires provided in the conversion were too small for the holes in the vertical frames. So I decided to buy some steel wire and solder them in place. I also decided to discard the flat slats on the sides of the basket and opted to insert the wires straight into the turret casting. The correct way was to make them point 45 deg to the vertical at the corners. However, this will make the construction a lot more complicated. I decided, that since, all IDF tanks have call signs on the sides of the baskets anyway, it would not be obvious if I covered my 'shortcut' with lead foil signs and fill the basket with stowage later.

I replaced the nylon mesh supplied for the turret as it does not adhere well with CA glue. I opted instead to cut up a brass filter mesh and solder it to the

bottom of the photo etched frame. By soldering it offered added strength to this otherwise flimsy assembly. The side panels used for the call signs were made out of lead foil which I pressed rolled in my factory. They were then folded over the top edge and holes made in the corners then thin brass wire was inserted to simulate the tie-down bungees. The basket was then added to the turret with several adjustments to make sure it cleared the body and sat correctly.

TURRET TIE-DOWNS

I twisted some enamel coated 22 gauge wires round a small paint brush and cut them into rings where I replaced the resin variety on the turret sides. Next, I drilled out the commander's hatch hinge rod and replaced it with 24 gauge copper wire so that I had an option to glue it open or closed after painting.

It was then time for me to prepare the anti slip surface. Unlike a Leopard 2 that I had modelled earlier, the IDF anti-slip material is not too grainy and I did not wish to use sand or Cast-a-Coat. The sand's texture would likely lead to the model being highly non-reflective, therefore, the risk of uneven coating can result in it looking too patchy.

I devised a method of making fine anti slip surfaces by using CA glue. I use a drop at a time on the surface to be treated by spreading the drop using a sharp pointed bamboo skewer over the surface in circular motion, like you would do when trying to achieve a burnished look when dry-brushing. Once it has started to solidify leave it to crystallize as it will be too viscous at this point for the CA to flatten and smooth out. This way a rough surface can be achieved without it looking too grainy.

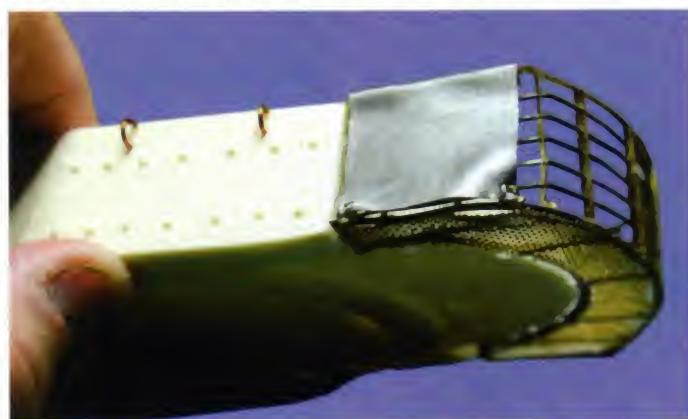
PAINTING

Then the whole model, when done with the CA surface treatment, was set aside to cure for a day. I sprayed the whole model with a very tough epoxy resin black. This is a type of automotive paint that is available in spray can form. First, I depressed the tip gently and have it splutter its content into a bottle. I diluted it with 50% Gunze thinner or Acetone and store it for use. This coating is so tough that when cured for 6 hours, you can use green wool on the model and it will hardly come off! It is the best base coat I know. I was introduced to this by famed modeller Calvin Tan who highly recommended it.

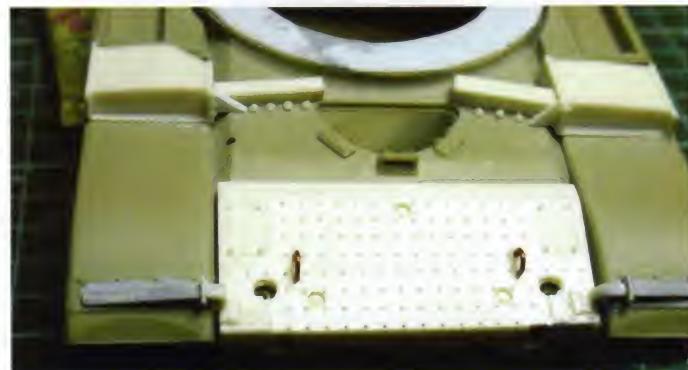
The model was then clouded over with Gunze 123 Green to ➤



From this angle we can see the high level of detail and crisp casting of the Legend Productions turret. On the right is the copper wire inserted through the commander's hatch hinge to make it workable.



The author opted to build the turret basket by deviating from the instructions. Steel wire was used instead of the supplied brass wire. The metal parts were all soldered together for extra strength.



Copper wire was used to replace the kit's resin lifting eyes. These were simply formed by wrapping the wire around the handle of a paint brush to get the correct radius.



The author had to modify the turret ring to get the turret to sit evenly. This involved adding a plastic card shim, which was thicker at the rear of the turret.



The model has been painted, shaded, glossed and had the waterslide decals applied. Detail painting will be completed after the model has received a coat of matt varnish.



An initial colour wash of raw umber oil paint diluted heavily with low odour thinners has now been applied. The surface is pre-wetted with thinners before adding spot washes around all details. A clean brush is then used to drag the wash down vertically to simulate rain streaks etc.

◀ get the general shaded look, then the model was gloss coated with Gunze gloss and later masked for the Chevrons. There were some decals I found to be useful from the Academy kit and used them on the turret. The others were sprayed on. There were some scraps and odds and ends I used for unit exercise markings for reservist tanks. These were not really the actual logos as they are not available, so I had to employ a little bit of artistic licence, with the dusting and weathering that was to follow, they hopefully wouldn't be too noticeable to the passing eye.

WEATHERING

I started the process with a wash and streak method. Basically, I worked on one square inch at a time. I wetted the surface with low odour thinners available from

art shops, then I tip wetted the details with raw umber oil that had been diluted 90 to 95% with the same medium. As this dries in 1 to 2 minutes, we can then streak it down like we would normally with rain marks and rust stains. Reason for the wetting the surface first is to keep the pigments stuck to the edges of the details, without which, most will depart from it and stick to surfaces surrounding the details forming halos and puddles of dirt.

Once the matt coat is applied, it was left aside for the night to cure. Next, we started the weathering process by dry-brushing the model. I prefer to use Vallejo paint and No. 4 brush of fine nylon. I use 3

"Moulding quality is first rate with the exception of only 2 or 3 parts suffering from a couple of air bubbles"

brushes for this; reason being, that when paint starts to cure on the bristles, it leaves a very unsightly rough finish. Whenever I feel that the paint is starting to cure, I wash them in thinners and soap solution on my desk and put it aside on a stand to air dry it. I pick up the

second clean brush and carry on dry-brushing the model to highlight the details with

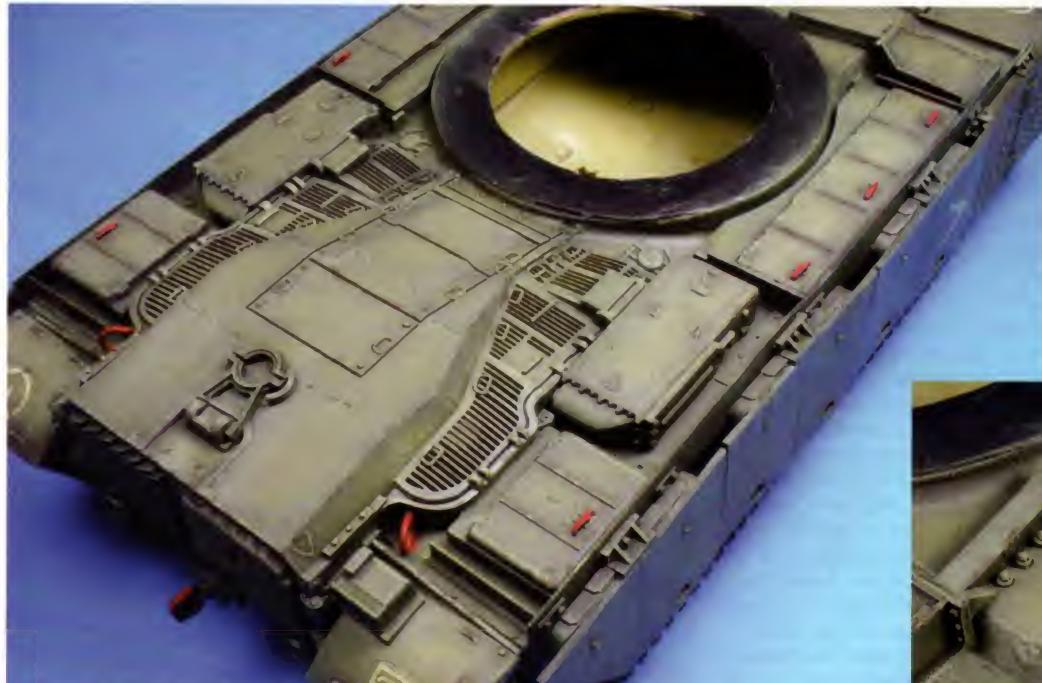
a Vallejo Khaki or English Uniform mixed with a little Olive Green and Buff. This is repeated when the paint starts to cure on the second brush. Three brush changes are normally sufficient for me to complete the hull and leaving me the turret for the next day.

While waiting for the paints to

dry, I modified an Academy IDF Tanker figure into an overweight, reservist commander that is yawning and is dressed in an older style uniform which is a little tight for him, now almost bursting at the seams. For more a detailed description for painting figures, I can wholeheartedly recommend getting hold of a copy of Osprey's Modelling the SS, by Calvin Tan, winner of several Euromilitaire gold medals and 2006's best-of-show award in Torrent, Spain.

I started to streak the model using Vallejo paint and glaze medium mixed with some matt varnish to simulate rain marks. This is best done with the mix diluted to an almost transparent state. Do exercise care when using this technique, as the effect only becomes fully apparent once it has dried. This is where I usually have to rein in my urge to overdo these effects. It's better to have too little and add more later, than to go too far on the first go. After all, the process is irreversible!

The next stage involved some subtle dry-brushing along edges and over raised detail etc. Current painting styles have moved away from this technique, but I think it still has its place and is a great way of bringing out even the smallest detail and emphasizing cast textures or anti-slip coating for example, again with all the ▶



Common to many vehicles in IDF service, towing and lifting points are painted red or black, likewise handles and grease nipples.





The Magach is nearing completion. All that remains to add is the commander, MAG machine guns and the aerial. The markings used were a combination of the waterslide one from the kit, the rest were either painted-on or came from the spares box.



◀ other techniques I have used, "less is more" Once I had completed the dry-brushing and rain marks, I was ready to add paint chips I used a mixture with a base made of Vallejo paints glazing medium, flow enhancer, Flat Brown and some Olive Green, black pastel chalk was then added to this mix. The ratios were as follows 2:2:5:3:3:2 with water being the last component. This mixture allowed me to use a fine Kolinsky sable 000 brush and load it with a little paint to add very fine chips and scratches. This concoction does not flow like paint, so therefore gives more control and when it dries the surface of the chips have a very matt finish, thanks to the pastel content, this effect in my opinion gives a very realistic finish.

The tracks were painted with the basic mixture of olive green and European Dust with some Beach Sand pigments from Mig Productions. This mixture were given some flow enhancer, glaze medium and acrylic gel to form a grainy but fluid paste. This was applied by dabbing the surfaces with a brush that has been loaded with the mix. This method differs greatly from the usual practice of just brushing it on dry. Bearing in mind that the model was to depict a reservist tank and not a vehicle engaged in combat, I limited my weathering to dirt and dust and some everyday wear and tear.

CONCLUSION

This was one of those projects that I found a bit of a challenge, but one I really enjoyed, which I think is what real modelling is all about. From the troubles I had with the turret fit, to the modifications I had to make to the enormous turret basket. Overall I think Legend have done a great job producing this space age looking version of the venerable old M60 Patton. ■

Modelspec

ACADEMY 1:35 M60 'BLAZER' AND LEGEND MAGACH 7A CONVERSION

Sets used

Academy M60-A1 Blazer
Legend Magach 7 A conversion LF1046

Paints used

Vallejo Khaki
English Uniform
Olive Green
Buff
Vallejo paint and glaze medium
Gunze Flat Base
Gunze I23 Green
Mig Productions Beach Sand pigment P030
Mig Productions European Dust P028
 Casting quality, clear instructions.
 Fiddly turret basket assembly and poor fit of turret parts.

Available from

Legend Productions available from Friendship Models.
Academy available from good model shops.



The author converted one of the figures from the Academy IDF tankcrew set into an overweight reservist in an older style shirt. His shirt could do with being exchanged at his barrack's clothing store for a slightly larger one!

From this angle it is almost impossible to recognise this tank is actually an M60.



1:35 MODERN AFV SERIES

M1A2 SEP



Unassembled model kit
maquette plastique à construire
this kit contains over 130 parts
for skilled modeller age 14 and over
box contains model of one tank

DRAGON

CREIGHTON GOES DIGITAL

Jim Carswell, having built the Dragon M1A1 AIM, is just the person to check out the latest A2 SEP.

Here is one of Dragon's recent releases in the 1:35 Modern AFV series, the M1A2 SEP Abrams. SEP is an acronym for 'System Enhancement Program', and is pretty much the most up-to-date kit you'll have for a current Abrams in action today. As expected, this kit relies heavily on parts from Dragon's excellent M1A1 AIM kit; but also includes two newly tooled sprues, a modified upper hull and engine deck, and new one-piece 'DS' tracks with separate styrene guide teeth all specific for the SEP version of the Abrams. Within the fully packed box you will find twelve bags of grey styrene sprues including the lower hull tub, for a grand total of sixteen individual sprues. Also included is a clear sprue for items such as periscopes, sight optics, and the clear bearing caps for the road wheels. New flexible DS (Dragon Styrene) T-158TT one-piece 'band' tracks with individually moulded open guide teeth replace the 'Magic Track' of the M1A1 AIM kit, and look to be very well done. Dragon thoughtfully package them with a small plastic tube insert to prevent a crease line where the tracks are folded back upon themselves in the bag. A revised photo-etch sheet includes screen for a different style of BRE (Bustle Rack Extension), which is also new to this kit. The small serial number data plates for the skirts are provided on this sheet as well. A small vacuformed

packet containing an optional turned aluminium gun barrel and preformed metal parts makes its return, along with a length of braided metal wire included for the tow cables and the sprues for the accessories such as POL and water cans. A small sprue of grey DS plastic containing the turret mounted guns and ammo belts round out the contents, although the .50cal gun is replaced by a new style particular to the M1A2.

The new SEP specific parts include the VCSU (Vapor Compression System Unit), a kind of fancy name for air conditioner I believe, mounted in the turret bustle, with associated ducting beneath the turret. The rear left corner of the upper hull is modified for the UAAPU (Under Armour Auxiliary Power Unit) or the optional Hawker Battery System. The ICWS (Improved Commanders Weapon Station) appears to be the best one to date. Apparently there is a small assembly quirk here in that there are no positive alignment aids when putting the top piece (X32) over the cupola base. The kit's technical advisor, Pawel Krupowicz, has posted a correction guide on the Internet (<http://vodnik.primeportal.net/pages/SEP/SEP.htm>), which shows the proper alignment. Basically you have to make sure the octagonal shaped top piece is centred over the lower base. The CITV (Commander's Independent Thermal Viewer) of the M1A2 is nicely moulded, with a separate

clear plastic piece provided for the optics. The new GPS mount adjacent to the CITV is also provided. Other SEP parts include the flat style headlight guards, 'smooth' front fenders, mine-plow connector box adjacent to the driver's hatch, and ammunition blow-out panels.

A small addendum sheet to the instructions points out that the tank/infantry phone box and slave cable receptacle box can be optional placements, depending on references.

Markings are provided for six vehicles; five for 'desert tan' vehicles in Iraq and one for a stateside three-colour NATO camouflaged vehicle. If you want to do a camouflaged SEP in Iraq, you're out of luck, only tan vehicles there. One note about markings as pointed out by Mr. Krupowicz: if you choose to do 'Armor Ghetto' or 'Cowboys From Hell', be aware that both these vehicles were destroyed/damaged in Iraq with loss of crew life. Further information can be found here: <http://www.network54.com/Forum/47209/message/1186919484/More+important+info+on+DML+M1A2SEP+kit>

I had originally thought you might be able to build an M1A1 or regular A2 version with this kit, but because of the re-tooling to the upper hull and engine deck, without a bit of serious surgery it's best to stick with the kit build. Out of the box, this looks to be a great kit, highly recommended for fans of modern armour.



Okay, I admit it... I am a Shermanaholic. I think the count might be up to 14 in the last 3-4 years, in 72nd, 48th and 35th scale. And Doctor Dwyerstein, it's only getting worse with all these recent DML releases in 1:72 and 1:35, plus the 1:48 scale Tamiya release...oh and the Tasca Firefly (hands trembling...). To say that you could make a hobby within a hobby modelling just the Sherman and variants would be an understatement. There's just so many marking options, different variants and superdetailing possibilities, it's hard to get bored.

The Sherman in question is the M4A2 76mm (W) in Russian service. The US Army didn't use the M4A2 version, instead preferring the M4, M4A1 and M4A3 gasoline powered versions (the M4A2 used a diesel engine, the US Marines and Commonwealth also used the 75mm version of the M4A2). The diesel option was ideal for our Russian comrades since the T34, KV and other tank series used this fuel type, thereby making logistics much less of a headache.

The Lend Lease program sent 4102 Shermans to Russia, split approximately 50/50 between the 75mm and 76mm varieties. The Russian nickname for the Sherman was "Emcha" as the number "4" resembles the Russian Cyrillic character for "cha". This 76mm version was of course the "wet" version, designating the "wet" ammo stowage which consisted of glycol containers which would help in case the tank was hit and prevented ammo from igniting under these circumstances. This version was also equipped with the much more potent 76mm main gun and a revised hull with a much better ballistic front profile (i.e., no protrusions for the driver and co-driver).

THE MODEL

I built this kit before the release of the DML and Academy M4A2 76mm (W) releases, so I won't make any comparisons between the kits as I haven't gotten around to building the other two yet. I used an old resin conversion I bought at a swap meet years ago. I also used a turned aluminium barrel, some resin late style dished road wheels, Verlinden idlers (detail on both sides), and old On-

The-Mark photo etch set and AFV Club T49 tracks. The donor kit was Tamiya's venerable M4A3 release from the dark ages.

CONSTRUCTION

Where to begin? With a Sherman I always start, by force of habit, with the suspension bogies. I do this as once this task is over the rest of the model is a breeze. The Tamiya bogies aren't bad and include casting marks, however, there's some serious work to be done here. First off the skid plates are too thick, I thinned them out slightly, but if I were to do the model over again, I'd use Aber or Lionmark PE skid plates. That being said, the bogies need 4 holes drilled on their front face, 3 bolts added to their bottoms, 4 bolts added to the skid plates to mount them to the main bogie and a few other plugs/bolts on the top of the bogie. Once you've done 6 of these, you're probably wondering why you didn't build a StuG III instead...however, press on! I glued the bogies to the lower hull ensuring they were nice and straight (a common error I see on many Sherman model kit, is bogies going off in every direction).

The next step was to finish off the lower hull by adding the rear plate (resin in this case with the correct M4A2 exhaust), idler mounts, idlers and driver sprockets. Finishing off the lower hull was the cast transmission cover, in this case a late one piece type. I covered this in Gunze Mr Surfacer 500 and stippled it with a brush to impart a cast effect.

MISSING SPONSORS

Once I had the resin upper hull in my hands, I followed usual procedure and cut some sheet styrene to cover the sponsons. This has only just been rectified in the recent DML releases, so for years Shermanaholics could be heard mumbling "sponsors" under their breath and gesticulating wildly. But I digress.

The upper hull was then glued using CA cement to the lower hull. I then began adding the PE details on the hull. The Tamiya tools, rear track stowage and driver/co-driver's hatches were used. The hull itself received photo etched side skirt holders, these really add the perfect touch to any Sherman model, regardless of scale. Once these were on, I used the Tamiya ►

"The vehicle in question had huge hand painted turret numbers and was covered in muck, filth and dust"

RED D



IESEL

Andrew Dextras converts Tamiya's M4A3 into a 76mm armed, diesel M4A2 with the help of a second-hand Tank Workshop resin conversion.





One of the main identifying features between the diesel engined M4A2 as seen here and the gasoline engined M4A3 is the width of the main engine grilles. The A3's extends to the edge of the top plate.



For the commander's cupola, the author used the Tamiya part from the base M4A3 kit. The commander's hatch came from Dragon - both their M26 and M4's are full of spare parts such as this hatch.



The area around the hull hatches has been re-textured using Mr Surfacer 500 to simulate the cast texture, which is missing from the resin hull.



Instead of using a complicated, multi part etched brass set for the rear stowage rack, the author chose instead to scratchbuild it from plastic card.

◀ front fenders enhanced with PE parts and PE headlight guards. To these guards I also added styrene "plugs" which were used to fill the holes left by the front lights when these were not in use. Don't forget to add chains to these as well; I used Aber PE for this.

Next, I added PE details for the drivers/co-drivers hatches, gun travel-lock and horn guard. Working with some of these small parts is both time consuming and dangerous (as there are no spares) but a good set of tweezers is essential and a steady hand never hurts. On the area surrounding these hatches I also used Mr Surfacer 500 to impart a cast texture.

Moving to the rear, I added the Tamiya tools, after careful removing the parts which were to be substituted by PE. I added the tie-down to the hull and then ran very thin lead foil strips through them and around the tools, including a PE buckle. This was probably the most difficult part of the hull assembly, as there's always the chance that a tie-down will come flying off. I then added chains to the fuel filler caps and a chain and pin to the spanner on the rear of the engine deck.

On the rear of the hull I wanted to depict the "luggage rack" in a folded position. Normally I would have used Aber's 847 part jigsaw, but in this case I built it up using styrene and carefully added the PE tie-downs to the lip of the rack. On the bottom of the rack I added the PE gun cleaning-rod mounts.

TURRET

Moving to the turret, assembly was quite simple with a top and bottom as per plastic kits. The Tamiya commander's cupola was used, but I enhanced this using brass wire and styrene. I then added the PE commander's direct-vision sight as well as the .50 cal folding rest. On the loader's hatch I added a very delicate PE periscope guard. Moving to the rear of the turret, I added the PE parts for the .50 cal MG stowage. The main assembly is a three part hinged piece, but the worst were the little 'U' shaped barrel holders...these were a nightmare to get bent to the correct form, but a little patience always helps.

The mantlet and main gun (turned aluminium) were then added and the turret was complete. The last piece of the Sherman puzzle was the tracks. I decided to use the AFV Club T49 type tracks for ease of use and the fact that they were the correct pattern for the vast majority of Russian Shermans. Imagine being stuck on an icy road on T48 rubber tracks vs T49 3-bar steel tracks... very different traction!

PAINTING AND WEATHERING

Since there was a variety of materials used to build the model (light cream resin, olive coloured kit plastic, white plastic stock, aluminium gun barrel, vinyl tracks, light grey Mr. Surfacer etc..) I primed the model with a coat of Tamiya XF-1 Flat Black to blend the elements together and to also give a bit of a pre-shade effect for the next coats.

I was fortunate enough to come across a very rare wartime colour photo of a Russian Sherman that matched exactly what I wanted to do weathering-wise (and had both solid dish wheels and T49 tracks... perfect!). The vehicle in question had huge hand painted turret numbers and was covered in muck, filth and dust. Exxxcellent.....

That being said, I laid down a base coat of Tamiya IJA Green. I painted the turret numbers using a brush and Tamiya acrylics. I then used my usual dual diffusion method of lightened coats of the base colour and then a postshade using the airbrush. Postshading is a highly effective replacement for washes or "filters" using a mix of very dark brown and the airbrush, thinned to around 90%. Just spray the dark brown mixture into any area where a wash would normally pool, like panel lines, around rivets etc. Credit must go to Aussie master modellers Chris "Stingray" Wauchop and James "Jimbaloo" Blackwell for coming up with this very useful modelling technique.

I chipped the model using my usual 4b pencil, and then added some rust streaking using oil paints. The model was then covered in sand coloured pastel powder as I wanted the model to look quite dusty. The running gear weathering provided quite the challenge. I painted the tracks ▶

"I decided to use the AFV Club T49 type tracks for ease of use and the fact that they were the correct pattern for the vast majority of Russian Shermans"



The kit tracks were replaced with a set of AFV Club's T49, 3-bar cleat tracks. These, like the Tamiya tracks are of the single piece 'rubber band' type. These tracks come in both standard length for the M4, A1, A2 and A3, and a longer length is available for the M4A4.



The author modelled his Sherman from a wartime colour photo, but unfortunately do to copyright laws we cannot reproduce it here. What we can say is that the Andrew has captured the look perfectly.



Just visible attached to each of the engine deck filler caps are the tiny etched brass retaining-pin chains. These are supplied in the excellent Aber Sherman detail set (35032) Aber are available from Historex Agents in the UK.



Replacing the Tamiya injection moulded plastic headlight guards really does make a difference to the finished model, as the kit parts are way over scale. Etched brass is by far the best medium for these parts.



No tank should be without the obligatory bucket. It is little details like this that can bring a model to life and add that human touch.



The pioneer tools received new etched brass holders and tie-downs complete with a lead foil securing strap, which the author had to delicately thread through the tiny tie-downs!

◀ black and then hit them with the same dusty pastels. I then hit the wear areas with the 4b pencil. The running gear got the same dusty treatment, but clumped up to simulate dried mud. As a final touch, I added fuel spills as per the photo, making sure plenty dripped off the sides. Oil paints were used for this.

CONCLUSION

It's hard to give this kit any sort of conventional recommendation as I used a variety of out of date parts. However, I would recommend that any Sherman enthusiast get their hands on either the DML or Academy releases and build up one of these intriguing Sherman variants, you won't regret it. As a footnote, there were some very late M4A2E8 Shermans delivered to Russia, so a kitbash between the DML Red Army M4A2 76mm (W) and the DML M4A2E8 could be a distinct possibility for the creative modeller, especially seeing as these were usually spotted with 45 gallon drums of diesel fuel on their engine decks. Oh, the muck, the filth... ■

Modelspec

M4A2 76MM SHERMAN (RUSSIAN ARMY)

Materials

1:35 Tamiya M4A3 (35122)
Injection moulded olive coloured styrene,
vinyl tracks, polycaps, waterslide decals.

Paints used

Tamiya Acrylics XF-1 Flat Black, XF-2 Flat White, XF-13
JA Green, XF-57 Buff, X-22 Clear, X-10 Gun Metal.

Accessories

Second-hand Tank Workshops M4A2 76mm conversion
On The Mark Sherman Photo-etch set
AFV Club T-49 track set.

References

Sherman: A History of the American Medium Tank,
R.P. Hunnicutt, Presidio Press, ISBN-10: 0891410805

See text.

Newer kits from Dragon and Academy available
for those who don't want to take the long road
to an M4A2 76mm (W).

Available from

All good model shops.



One thing the author isn't afraid of is getting his models dirty. There is an art to getting a model to look grubby without it looking a mess, and Andrew is a real expert at getting the balance right.

The first model I ever built was the Tamiya Panther A, 1:35 scale featuring a wire remote control during the mid 70's. Since that day the Panther has become my favourite tank to model. Although badly built, terribly brush painted in grey and always running off its tracks, I loved to see my creation running down my model landscape I created for this purpose.

30 years later, in 2001 after the market launch of Tamiya's fantastic 1:16 scale Tiger I radio controlled tank, I met someone over here in Germany, who intended to manufacture a 1:15 scale radio control Panther tank.

After two years he offered a strictly limited edition run of this kit. It took another year of research throughout the museums in Europe and two years of construction, until I finally finished the model presented here.

THE KIT

From the first view it was quite clear that this model is designed to be a remote control version and not really a scale modeller's dream. But as I am a keen scratch builder used to working with different materials, I took it as a challenge. Much soldering was required along with technical modelling i.e., working with various metals, plans and drawings, this project really was a model engineering project.

The lower hull, suspension, road and idler wheels are all made from aluminium, whereas the upper hull and turret is formed out of glass fibre material, covered with a thin layer of resin. Many of the exterior fixtures and fittings, including the track links are cast in metal, the remainder of the parts are resin castings. The aluminium gearboxes provided with the kit are the best I have ever seen. There is nothing to compare regarding the performance of this tank in rough terrain. The same applies to the turret gear, which is also of highest quality.

CONSTRUCTION OF THE LOWER HULL

Each turned aluminium road wheel was equipped with the standard 24 rim bolts, as seen on Ausf A's. The 1mm diameter brass bolts were supplied by a German company called Knupfer, who offer a wide range of high quality micro screws, bolts and nuts. After fitting the bolts, a pair of rubber rims had to be placed onto each wheel, followed by the installation of the steel centre shafts, each pressed onto its aluminium torsion bar. The Steel sprockets and aluminium idler wheels could then be installed to complete the lower hull and

suspension.

The rear hull plate needed some reworking, namely the jack and the exhausts, these were made out of 5mm diameter brass tube, bent in sand. The brackets for the horizontally stowed jack were made out of copper profiles and fitted with two brass wing nuts.

THE TURRET

The turret like the hull is glass-fibre reinforced resin, using the comprehensive reference I had gathered I set about adding all the detail I could. The commander's cupola hatch was blended to the support arm with Magic Sculpt, extra detail including the handle and locking clasps were fashioned from brass rod and sheet.

The direct sight in front of the forward periscope was also made from brass sheet. The missing hand grips and lifting eyes on the turret were shaped from brass rod and wire.

I decided to improve all of the weld seams, this was a very time consuming task. Magic Sculpt was used for this task, it isn't until you actually start adding all the welds do you realise just how many need to be added.

The greatest challenge I set myself was the fabrication of the Fliegerbeschussgerät (Anti Aircraft equipment) as I wanted it to function in the same way the real thing does. The mount was made fully movable using brass, copper and aluminium rod and tube as well as 1.0 mm and 0.6mm screws. Again the reference I had acquired from the Panther at Munster proved invaluable.

THE UPPER HULL

The glass-fibre upper needed to be strengthened using brass profiles and epoxy glue. After opening and reworking all the hatch areas I went onto detailing the driver's and radio operator hatches. Each had to be equipped with a rotating post, a handle and the internal pad. The safety latches for the hatches placed on the transmission deck were made from plastic card and brass. A spring, turned from electrical wire completed these units. The hull roof-plates which covered the transmission and the engine deck received the missing countersunk 1mm brass bolts. At this point of the construction, it was still possible to model an early Ausf. A with the letter box style radio operator's machine gun port, characteristic of this type. However I decided to build a later Ausf. A featuring the ball mount hull machine gun. I replaced this part by using the ball mount from a Tamiya R/C 1:16 King Tiger. ▶

CAFFÈ

Uwe Henning describes how he detailed a limited run fibre-glass 1:15 Panther A into this stunning model.



ITALIANO



The lower hull has been constructed from aluminium. At this point the torsion bars and suspension arms were installed. Note also the brass strips which will form the skirt armour hangers.



The aluminium gearboxes provided in the kit are the best the author has ever seen supplied in an R/C kit.



To form the brass tube into the correct shape, the author filled them with sand before bending, which prevents kinks appearing in the bent section. Note the tiny 1:35 Panther at the bottom of the picture!



With the construction complete, it is clear to see how much work has gone into this huge radio controlled 1:15 Panther Ausf A.



The muzzle brake supplied in the kit has been cast from brass. Note the tiny locking tab and retaining bolt, which prevents the muzzle from being unscrewed from the barrel.



The spare track links on the turret side were 'borrowed' from the Verlinden Productions discontinued 1:15 scale resin Panther Ausf A.



The travel lock for the Kw.K L42 L/70 75mm gun was scratch built from copper and brass. The black plastic retaining-chain over the barrel came from the model railway manufacturer, Preiser.



The handles for the shovel and axe were made from real wood. The author shaped them from tooth picks. The tow cables came from Aber's 1:16 scale Tiger I update set.

► TRAVEL LOCK

A further challenge turned out to be the reproduction of the gun travel lock. The kit supplied part is a cast metal item, which I didn't want to use, so I decided to build a new one out of copper and brass. Once measured and cut to pieces, the main parts of the travel lock consisted of the movable barrel rest and the support frame, these were soldered together, this step required five clamping tweezers to fix the five loose components into place. To guarantee its functionality, a brass shaft was used to fit these two main parts together. To hold the shaft in place, two split pins made from electronic wire and two washers were used. The travel lock's chain, like all the brass parts used for my scratch building came from the German supplier Knupfer. It isn't scale at all, but was by far the best solution. Finally the travel lock received a small chain from Preiser (a company which offers a wide range of model railway accessories) for the retainer which locks the barrel rest in either vertical or horizontal position.

CONSTRUCTION OF THE EXTERIOR

Once the deck details were finished, I went on with the tool stowage racks. The tool clamps etched copper items 'borrowed' from one of Verlinden's old 1:15

Resin kits. I did look at the 1:16 etched brass sets from Aber, but unfortunately were too small for 1:15 scale project. The most complex parts to construct were the actual frames for the tools and the spare track hangers. Brass strip and tubes was used, copied from the dimensions taken from the Saumur Panther. The difficulty here was trying to solder all the frame components together at the same time! So I fixed most of the parts for this purpose with staples onto a piece of wood, in order to avoid any of the parts moving during soldering. The C shaped towing hooks were cast in white metal; I thickened these parts with Magic Sculpt and created the rough cast texture at the same time by stippling the soft putty with a cut down paintbrush. The tow cables, except the small track fitting tow cable came from Aber's Tiger I upgrade kit. Most of the tools were developed from wooden toothpicks and polystyrene, with exception of the shovel, which I borrowed from the 1:16 Eduard Schwimmwagen. The glass-fibre fenders that came with the kit were replaced with new parts fashioned from copper plate. The four embossed ribs on the fenders were created using half round plastic card strip glued on with cyano glue. The lower front edge featuring the three bolts and the wing nuts for the fender ►



The mesh used for all of the engine deck screens came from VerlindenProductions, and although designed for 1:35 scale, it was perfect for the author's needs.



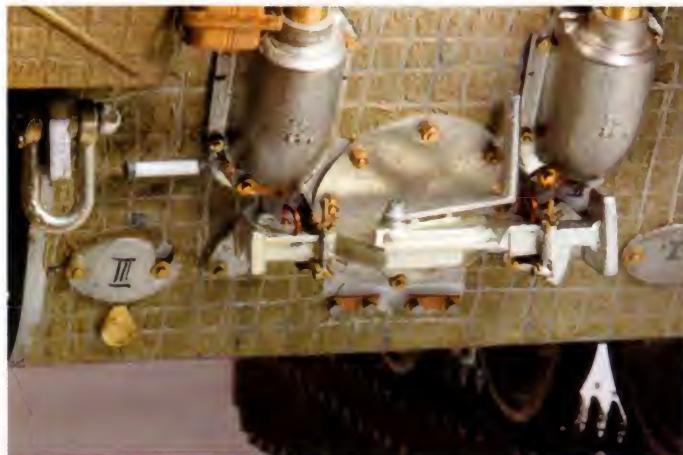
The commander's cupola anti-aircraft machine gun mounting is a real testament to the level of detail the author has added to this impressive model.



The driver's hatch-retaining lock was scratchbuilt using plastic card. When scratchbuilding items such as these, good reference is essential.



Close-up of the turret rear escape hatch has been made in such away that it is fully workable.



The rear hull plate received some extensive detailing. The tiny brass nuts, bolts and washers, these were all supplied by German company called Knupfer at www.knupfer-grossbahn.de



The width indicators were scratch built using brass wire and tube. The ball on the end was fashioned from Magic Sculpt. The fender was constructed from copper sheet, brass strips and thin plastic card.



Tech Tip!

To replicate the zimmerit anti magnetic-mine paste seen on many German tanks and self-propelled guns, the author used a ready mixed car body filler from an automotive supplier. The filler was applied using an artist's spatula, and a grid pattern was then marked into the filler using a thin straight edged tool, such as a metal six inch ruler. After allowing the filler to start hardening for a while a steel wire brush was dragged over the surface. The grid pattern was then retraced before a final brush over using a softer copper brush to achieve the desired effect.



extensions was soldered to the copper fenders. The wing nuts are drilled out and reworked using 1mm thread. The two width indicators were made from brass tubing, the ball was formed out of Magic Sculpt. Each pole received its base, which was screwed onto the left and right fender using 0.6 mm brass screws.

GRILLES

The air intake grilles and cooling fans of the Panther were generally equipped with mesh wire frameworks to prevent the

fans from ingesting leaves and to keep away debris from the vitally important radiators. For this particular purpose I chose Verlinden's mesh in 1:35. Strange, but it worked perfectly for this scale. On the round cooling fans I simply glued mesh wire onto the cast part and then trimmed the excess from the edges. For the rectangular grilles, I made frameworks from plastic card, then glued the mesh to the undersides of the frames before fixing in place with 1mm brass screws, one on each corner.

Typical of Panthers serving on the Italian front, frames for additional stowage were fabricated over engine deck air intake grilles. These were created angled brass profiles available from all good model shops.

THE SIDE SKIRTS

The side skirts and their brackets are custom-built items, as well. The Panther in Saumur unfortunately received, during its post-war restoration, side skirts that do not match with the original measurements, so there was no chance taking this into account as a reference.

I decided to use Trojca's Panther book which contains some excellent 1:35 drawings for this particular job. The dimensions were drawn out onto a thin sheet of aluminium before being cut out and the edges sanded smooth

ZIMMERIT

If choosing to model an Ausf. A, then zimmerit has to be added. zimmerit on Panthers in the Italian theatre usually featured the horizontal or vertical pattern. They also appeared with a square pattern, which I decided to go for. I am always afraid of this surface finish, although I am a fan of it, zimmerit may damage the result and overall impression of the model.

For the purpose of zimmerit I used a single component putty from Presto. Presto is actually an automotive supplier. The basic layer was applied with a spatula. Followed by the square pattern drawn on using a home made tool. I waited until the filler had started to cure, but not harden completely; I then tore off most of the layer by drawing a steel wire brush over the surface. The grid pattern was then retraced into what remained of the filler. The final texture was then created with a brass wire brush,

by being drawn softly over the surface. Reassembling of the tool racks took place by bolting them to the hull, supported by some cyano glue. Finally I created weld seams around these frameworks by using Magic Sculpt.

PAINTING

I can highly recommend Miguel Jiminez' book "FAQ" for those, like me, who are not quite so experienced in painting and weathering procedures of a model. It helped me understand a lot of techniques I had previously heard about and tried to create unsuccessfully, but thanks to reading the book, I found these techniques easier to understand and I feel really helped me improve my painting. As the Panther had been designed as a remote-control fully workable model, disassembled it again, as far as possible to make painting easier on a model of this size and weight.

I started with Tamiya's fine surface primer, sprayed directly from the can in three thin layers. Once this primer had dried, the first thin layer of a mixture of Tamiya Buff, White, Sand Yellow and Desert Yellow was applied. The actual ratios were mixed by eye, until it matched the colour I had in my mind. Next I prepared some paper sketches with drawings of the camouflage pattern before I started, these would help me visualise the finished scheme before actually committing paint to the model.

For the camouflage I used a combination of Tamiya and Gunze acrylics. Tamiya's Red Brown was perfect a perfect match for the colour I wanted, but unfortunately they did not have a green in their range that suited my needs. Therefore I decided to go with Gunze for the green, choosing first the olive green covered by a light



The crew figures were converted from Tamiya's 1:16 Wehrmacht Tank Crewman (36301) and Africa Korps Tank Crewman (36310). The standing figure received a replacement head from the Tamiya Infantryman On Manoeuvres (36307). Both were painted using oils.



All of the wooden boxes crates and the table were built from real wood obtained from a model shop specialising in model boat building.





A stunning piece of modelling that Uwe should rightfully be proud of.

misting of RLM 82 Light Green. After leaving the model to dry for a week, I applied a filter using a mix of burnt Sienna and turpentine. This filter modified the base tone and enriched the colours. Once again I allowed it to dry out for a week. The model was then completely oversprayed with a gloss varnish using Tamiya Clear X-22.

WASHES

This gloss layer helps the wash of black and Vandyke brown to flow around all of the details etc. By glossing the model first the wash can be more easily controlled and cannot stain the porous matt paint of the camouflage colours, which can ruin the filter effect applied earlier.

I also used this procedure to accentuate the square Zimmerit pattern. If the mixture does go onto areas where it should not be applied, just draw it back with a brush moistened with clear turpentine. The mixture also can easily be dabbed off by using a tissue handkerchief. Once dry.

Chipping was the next. For this step I used Model Masters Enamel colour exhaust metalizer. It is a highly pre-thinned paint applied with a 000-brush; it will guarantee you a perfect result on all the areas you want to show damaged paint.

On my particular model I did also some fading with pigments. For this I use pastel chalks abraded to a powder. For instance the exhaust

pipes on the Panther received a base colour of white, now this may look a little bit strange to start with, but once covered with reddish brown and black pastels gave a realistic effect to the pipes.

FINAL WEATHERING

Ensure that the areas where you apply the pastels has been matted down first, If the surface is of glossy finish the pastels won't stick to the surface. Finally the Panther received a coat of dirt. For this purpose I prepared a mixture consisting of fine dust I collected from a foot path, along with Italian Lavazza espresso coffee granules, water and white glue.

This mixture can be easily coloured by adding ground up pastels or pigments and applied using an old brush. The mixture sticks very well because of the white glue. Please note that this

is not applicable for smaller scale models as the appearance of the particles will be too rough.

THE CREW?

Stan Laurel & Oliver Hardy in Italy - after their reincarnation. I probably will never become a good figure painter like Mark Bannerman, John Rosengrant or Robert Doepp - nevertheless I am relatively satisfied with the result, despite the deathly pale finish of the faces. This was my first attempt at painting figures completely using oil paints.

The scene describes a coffee break after the transfer into the new employment area San Fortunato.

Hoping for better weather, both crew members look full of expectation towards the sky. As this scene takes place in Italy it is obvious to use Italian coffee

for their refreshments. All of the accessories, cups, coffee spoons, the table, the Italian coffee machine, the blow torch for heating the machine up, the bucket, crates, fruit crate & the Lavazza coffee were scratchbuilt using many different materials. By the way, Lavazza coffee is still available today and is my personal favourite brand of coffee! ■

Modelspec

1:15 Sd.kfz.161 Panther A

Paints used

Tamiya Acrylics: X-22 Clear, XF-1 Flat Black, XF-2 Flat White, XF-52 Flat Earth, XF-57 Buff, XF-59 Desert Yellow, XF-60 Dark Yellow, XF-61 Dark Green, XF-64 Red Brown, XF-65 Field Grey
 Gunze Acrylics: H47 Red Brown, H340 Field Green, H422 RLM 82 Light Green, H405 Olive Green
 Humbrol Enamels: Various colours
 Schmincke Oils: Various colours

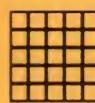
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 Concord, Cockle - Panthers in Italy
 PP, Trojca - Sd.Kfz 171 Pz.Kpfw. V Panther
 Podzun, Riebenstahl - the legendary Panther
 Achtung Panzer - Panther, Jagdpanther
 Andrea Press, Mig - FAO



MEET THE AUTHOR

My name is Uwe Henning, I was born in 1962 in Düsseldorf. I grew up with my Grandpa who served in the German Wehrmacht in Russia. During my own time in the German Army I served as an ordnance observer officer, commanding an observation tank. I am married and have a daughter, and am currently employed as a marketing manager in the pump industry. I started modelling at the age of eight with Airfix aircraft, then moved on to a 1:35 remote controlled Panther - it was a terrible result! At the age of sixteen I discovered my real passion; Enduro Racing, but by thirty five I stopped the racing and rediscovered modelling, especially Tamiya big scale remote control tanks and scratchbuilt models in 1:16. I won the German Model Master contest in 2003 with a Tamiya Tiger and the S&T Figures in 1:16 with 'Best in Class' and 'Best of Show'. ■



LAID TO REST IN LIBYA

Mig Jimenez explains his painting and weathering techniques for producing an ultra-realistic wrecked tank.

Destroyed tanks have always been wanted by many modellers. But they have always been something secondary. They have never been the main subject of a diorama or vignette. I have been making destroyed tanks for 15 years and I have always believed that this topic was something special and different. These gnarled and rusty forms are

sculptures full of life and colour. Here the modeller can be really free with the composition and the colours, although we always have certain rules to follow.

We believe that a destroyed vehicle doesn't have any logic. We think that it is result of randomness. Perhaps that is true and on many occasions we can see extraordinarily strange things. But it is also certain that almost all the

destroyed vehicles show common traits that always repeat, and it is those elements that will be our starting point.

Another difficulty is in interpreting the colours. It is very hard to find colour pictures from 1942. But at the moment there are many Web pages, where it is possible to find some fascinating period colour photos, www.wf.weltkrieg.ru is one such site.

When studying black and white photos, it is impossible to interpret the many shades of grey and try to transform them into colours. It takes a lot of studying, preparation and artistic knowledge to be able to relate each shade of grey into a chromatic colour.

This is why, we should use colour pictures, even if they are from different periods and of different vehicles, after all when

1



The reworked and scratchbuilt parts have now been copied in resin and are now waiting to be painted.

3



The original camouflage colour has now been applied to the external areas that have not been burned or suffered from heat damage. Tamiya Buff and Dark Yellow have been used for this.

4



By using combination of greys and orange, certain areas and parts have been picked out to help create contrast and chromatic variations.

5



To replicate the effect of intense chipping, Vallejo Buff and Orange were applied using a small piece of sponge. Acrylic colours were used because of their quick drying time.

6



A mixture of Abteilung 060, 080 oil paints and Humbrol 33 and 62, were used to draw vertical stains and streaks on the hull side plates.

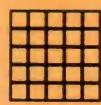
a tank gets burnt out the results will be the same. Rust looks the same now, as it did 60 years ago! Some current books contain many images of burnt tanks, especially from the recent conflicts in Iraq or the Balkans. We can use those references and transpose those colours and effects to a Tiger I, T-34 or a Sherman for example.

COMPOSITION OF A DESTROYED TANK
Maybe, the most complicated thing is the construction and composition of a tank like this. When we paint a commercial kit, we only have to follow the instructions and we will obtain a perfect vehicle, but when making a destroyed vehicle, everything is different. In my case, it was necessary to make a totally new PzIV. The whole of the interior

had to be made from scratch. Then, I made copies in resin, I then used these copies to make the destroyed chassis. If it went disastrously wrong, I could always start again with another of the copies. When the chassis had the appropriate form, I added new details in plastic and I made another copy. On this new copy I added the final details and copied it yet again in resin. This process was

very slow and laborious, but I got a sturdy copy to work on and to use in my diorama. ■





Tech Guide

- Painting and weathering a burnt-out wreck

7



Then, with a clean paintbrush lightly moistened with turpentine, to tone down and blend the previous stains.

8



Some darker stains are now added, again using oil paints. Once blended will give a nice pleasing effect and add contrast to the previous streaks.

9



Once the previous layers are dry, patches of the vehicle's original camouflage colours are added using a fine tipped brush.

10



We repeat the process of adding short vertical stains again. We only vary the colours and the intensity. It is necessary to repeat several times the same processes to create a sensation of depth and variety of colours.

11



Mig Productions products are distributed by Creative Models in the UK. See advert on page 7 for details.



13



The pigments are applied dry, before adding turpentine thinners, by doing this it allows the pigment to be washed into the deepest corners. Using thinners also helps the pigment bond to the surface of the model.

While the pigment was drying, the time could be used to paint other details, such as the track sections which are embedded into the groundwork.

14



Returning to the hull sides. This time Humbrol Matt Black and blue oil paint. This effect really adds contrast to rusty areas. Once in place, these colours can be blended by using a stippling with a stubby brush moistened in turpentine.

15



Tech Guide

- Painting and weathering a burnt-out wreck



A sponge dipped in Vallejo Dark Grey 994 has been used to simulate the areas where the original panzer grey has worn through the sand coloured top coat. This is best done on areas of high wear, such as the engine deck and along edges, corner and around hatches etc.



Lastly, with different rust colours, we can add the final touches to the tank. The scale model is not finished yet. But it is best to do as much painting and weathering before attaching to the base. The final blending once the groundwork has been finished.



The wreck is now ready to be fixed in place. Compare this photo to how it looked back in step six.

The PzIV is placed on a wooden base, keeping in mind the rules about composition. Not to have the model running parallel with the edges and not forgetting to leave room for the other components to be added.





20
White glue is now being spread around the surface of the base to act as a sealing agent before adding the putty.



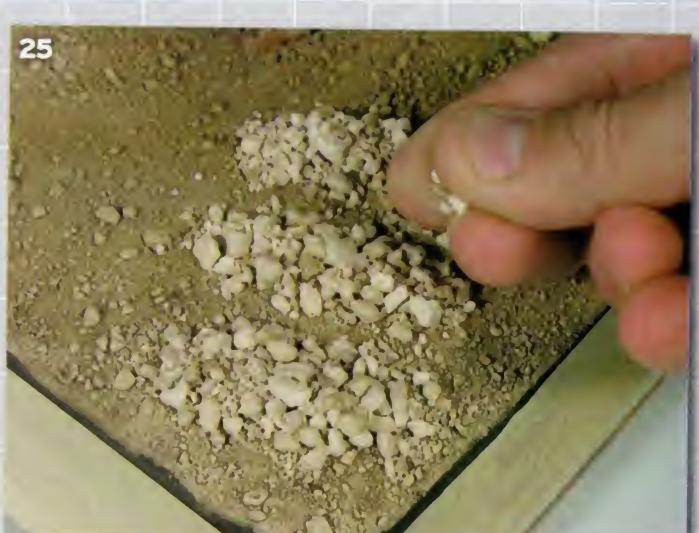
21
The putty is pressed onto the base firmly to avoid it becoming unstuck once it dries out.



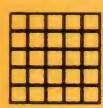
22
The base coat for the groundwork is applied by brush, this avoids having to mask the wreck from overspray when using an airbrush. The subsequent shading and highlights can be added using an airbrush in a controlled manner.



24
To accentuate the contrast, filters from "Sin Industries" have been applied to accentuate the texture of the groundwork.



25
To make the graves, piles of small stones are fixed in place with diluted PVA glue.



Tech Guide

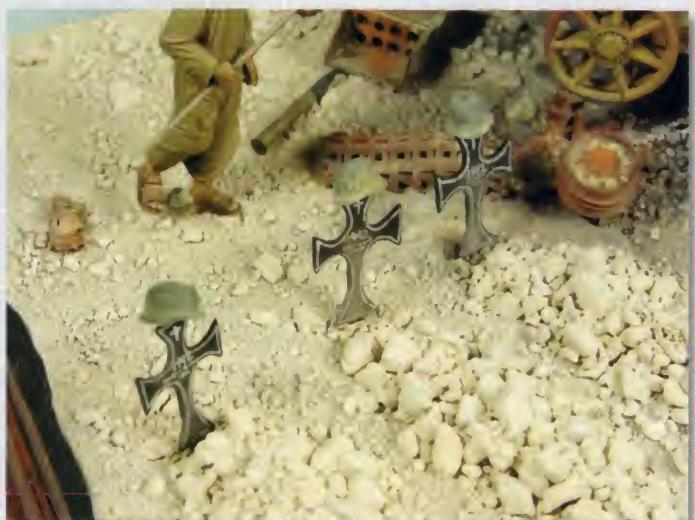
- Painting and weathering a burnt-out wreck



The completed scene. Note that sections of individual tracks have been added to the drive sprockets.



White pigments have been sprinkled over the road wheels to simulate the ash left from the burnt rubber tyres.



The crosses and helmets are a poignant touch to the scene.



Mig Productions' Arab Farmer adds the human touch to scene as well as giving scale to the wrecked Panzer IV.

To get a natural and realistic sag on the broken tracks it is best to use individual link working tracks from company's such as Model Kasten or Friulmodel





STALIN'S TRACTOR

Glenn Bowen casts a keen eye over Cyber Hobby's latest release, The T-34/76 STZ Mod.1941

This particular T-34 by Dragon Cyber-Hobby is based upon the ones that were produced at the Stalingrad Tractor factory. It's a '2 in 1' option kit, which allows you to either build the initial production version with rubber road wheels or the early version with steel road wheels. A lot of the parts come from previous released T-34 kits such as (No.6092, No.6185 and No.6205) you also get all new steel wheels, idlers and drive sprockets plus a bag of Magic track links. Upon opening the box, which is bursting at the seams, you are met by 391 parts, 90 track links, two sizes of tow cable, turned metal barrel, clear plastic lenses, decal sheet and an etched-brass set that is truly outstanding. 67 of the 391 parts are not used so there's plenty for the spares box including a complete turret.

The kit comes in a light grey coloured plastic with the detail being truly amazing. The detail around the lower hull and running gear is nice and crisp especially on the fine steel wheels and drive sprockets. The rubber road wheels also come with the correct amount of bolt fittings, which are ten. With the suspension arms being moulded separately, it should not prove to difficult to have the model looking as if it was going over uneven ground for us diorama builders out there. Moving to the upper hull, and the

same amount of detail is here to. The weld seams are really nice and are not to over done. A nice little touch is the inclusion of the sunken screw heads on the hull roof, just under the turret. The fit of the front plate and rear engine deck covers are really nice and tight with no need for filler at all. A lot of the etched brass is used here, from the engine-deck screens to the tie-downs for the air intake hatch. There are also quite a few stowage boxes on these early versions, so there's plenty of choice here on the position of them. The turret also goes together flawlessly with a well detailed gun breech, which can be seen through the rather large turret hatch. The hatch has some nice details too, with the

locking mechanism in etch. As with Dragon kits the etch set is included to give the modeller the option of making the kit that little bit better or not if that's what you wish, because the standard of the kit is truly amazing anyway. The fret includes engine-deck screen, tie-down loops, buckles and straps for the boxes as well as a hole lot more.

The instructions are very straightforward and easy to follow so no problems there either. There are four decal options one for the 1st Guards Armoured, Eastern Front 1942, Unidentified Unit, Eastern Front 1942, German Army, 1942-43 and finally Leningrad 1942-43. So if you like Russian Armour like I do, this kit is a must have. ■



Dragon have thoughtfully included a set of their excellent Magic Tracks.





BRASS-TRACK

I am sure that most, if not all of you, have probably at some point bought an etch set with which to detail a kit you were building. Etch sets have always been small, slim packets with a protective card backer and have contained a couple of etch sheets and one or two pages of instructions.

But no more!

This new set from Lion Roar comes in a large, stout box with a full colour wrap-a-round sleeve showing you pictures of the goodies that are lurking within. Included are not one or two, not even five but thirteen large etch sheets! You will also find a heap of cleanly cast resin pieces including a full engine, a beautiful two piece turned metal barrel and

sleeve for the .50cal, lots of tiny .50cal shells both full and used, various thicknesses of brass rod, a dashboard decal sheet, pre-marked thin clear plastic for the windows and some wire, chain and a pressed metal engine base. In order to help you put this all together are fourteen pages of instructions. Phew!

Looking at both the picture of a completed model on the box front and the instructions you can see that very little is left from the Dragon base kit, only the chassis, the tracks and drive units, front wheels and the front mudguards. Everything else is replaced with etched metal.

Reading the instructions it becomes clear this is a complex kit and not for the faint hearted,

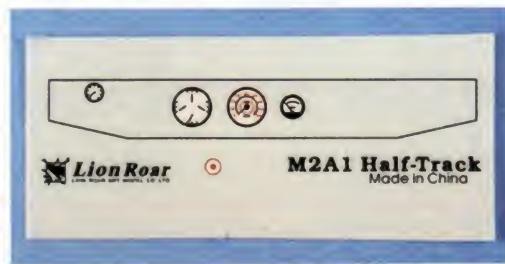
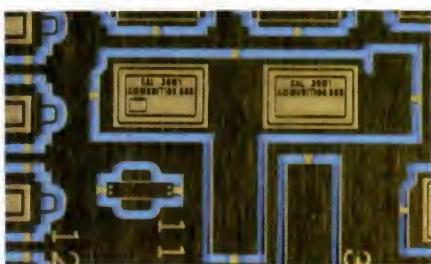
but if followed logically it shouldn't be too difficult a build, as the box like structure of the vehicle means that the various folds that will need to be made are mostly all at right angles. If you are careful and possibly use an angle gauge then it should all go together with patience. One nice touch is that all the various securing screws have been correctly etched and are not portrayed as the half round rivet heads Dragon have moulded them as.

The display potential of this kit is huge as all the various cupboards and compartments can be built open. Very little extra needs to be added to the kit if you want the ultimate halftrack, though you could possibly source a set of new resin front wheels and

turned metal .30cal barrels from elsewhere.

All in all this is a superb conversion kit and should be bought by the serious rivet, (or screw head) counters amongst you. A conversion of this complexity and containing this amount of material would, you'd think, be horrendously expensive? But you'd be wrong. It does cost just over £7 more than the base kit which might seem a lot but when you break down the individual items and work out their costs as supplied separately then I put the total at around four times its value! And at the end of the day you are also left with almost a complete M2 Dragon kit to use for another project. Highly recommended. ■

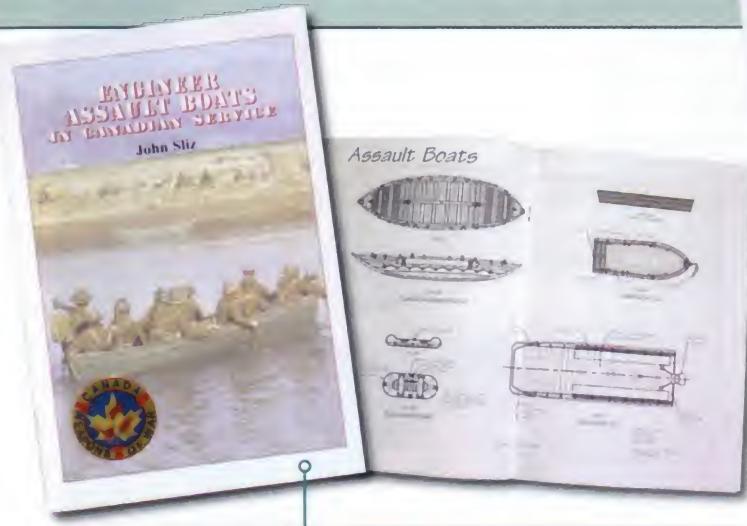
Graeme Carruthers takes a look at what is possibly the ultimate etched detail set!



This and all the Lion Roar range are imported in the UK by Lou Stener Models www.armour-models.co.uk



Book Reviews



ENGINEER ASSAULT BOATS IN CANADIAN SERVICE

JOHN SLIZ • SERVICE PUBLICATIONS • ISBN 1-894581-43-1

It is said if you are prepared to look hard enough you will find a book about any subject. Well for anyone looking for information about Engineer Assault Boats, look no further. One of the recent books published by Service Publications provides all the information one needs to know about this rather esoteric, but nonetheless vital, subject.

The familiar format of 24 pages contains 25 black and white photos of various assault boats, mainly in use during exercises but also during combat. The authoritative text begins by describing the Canadian assault water crossing capabilities (or rather the lack of it) prior to WWII. This in turn leads to a mention of the development of the Experimental Bridging Establishment at Christchurch, England (more famous for the development of the Bailey Bridge). Four boats are described in detail, Reconnaissance boat, Assault boat, Folding Boat Equipment and the Storm boat. Their description is also supplemented by an account of their use in combat (with lots of mention of the withdrawal of airborne troops at Arnhem!). The boats, when not in use, required transportation. This is also covered by the author accompanied by several photos. Before reading this book I was quite unaware of the versatility of these craft. Not only were they used to carry troops but were also used to construct bridges and to convey larger items of military hardware such as anti-tank guns. A Recicast

6pdr being conveyed across the Siene River in a Storm Boat would make an interesting diorama. All that's needed is a model of a storm boat!

Once again the publishers have not been afraid to cover a topic not considered mainstream and are to be applauded.

Available from www.servicepub.com

Keith Goldsworthy



SECRET WEAPONS OF THE CANADIAN ARMY

ROGER V. LUCY • SERVICE PUBLICATIONS • ISBN 1-894581-40-7

This relatively new publication follows a familiar format from this accomplished publisher. The main difference between this book and others of the Weapons of War series that I have reviewed in the past from Service Publications is the number of pages, totalling 128 in all. The text is accompanied by many black and white photographs and drawings, many not seen in print before.

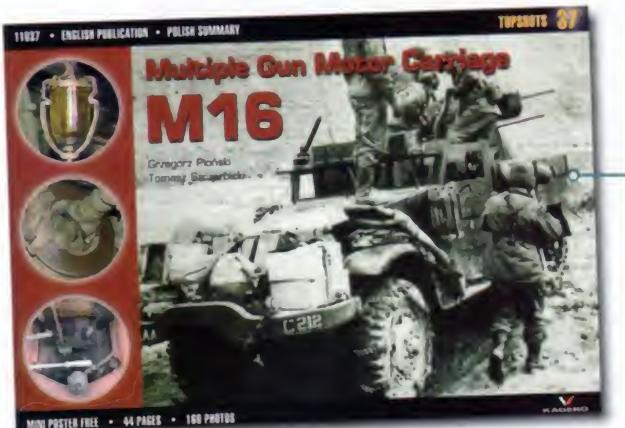
The book begins by describing the evolution of Canadian production of war materials and the close cooperation with Britain. Initial production of military equipment followed closely British plans and instruction. However as war continued so did the need to develop more radical thinking and designs leading eventually to the production of equipment as diverse as proximity fuses to self propelled artillery pieces.

The book is divided into logical chapters each dealing with a particular type of equipment ranging from small arms weapons to tank-based items. The vast majority of designs never made it to the production line (some struggled to get off the drawing board) with prototype status the best many could achieve. Those that got as far as being built underwent trials but often rejected due to various deficiencies, and often due to the fact that the pace of war made it no longer a requirement.

Although the book deals with what many would consider as failures it is still a fascinating read and describes very well indeed how ideas became reality (even if it was only as far as a prototype or wooden mock-up). The various designs are too numerous to mention in this review but of particular note are the Hippo mine clearance vehicle which looked like something from a Star Wars movie (one of those aforementioned ideas that never got further than the drawing board), the Staghound rocket launcher, a self-propelled PIAT battery (mounted on an Universal Carrier) and a Ram Tank-mounted 3.7 inch anti-aircraft weapon. In all this was a very interesting read and has certainly conjured up a few ideas in my mind for possible future model conversions (unfortunately, much like the development of military equipment, my ideas never get beyond the drawing board!!).

Available from www.servicepub.com

Keith Goldsworthy



TOPSHOT 37 - MULTIPLE GUN MOTOR CARRIAGE M16

GRZEGORZ PLONSKI AND TOMASZ SZCERBICKI

KAGERO • ISBN 978-83-60445-52-5 • SOFT BACK 42 PAGES

As there is a recent resurgence in interest in American halftracks then this small book will be a most welcome addition to most modellers libraries. As a photo study this book can't be beaten, as it contains clear colour images of a restored vehicle both inside and out, with particular attention being paid to all the small details modellers crave, such as engine piping and wiring, the gun mount and drivers compartment and its information plaques. All the nuts and bolts on the vehicle are covered and this book should allow you to superdetail any of the up coming kits or even the earlier effort by Tamiya.

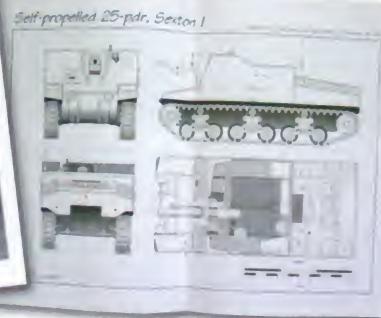
Highly recommended.

Available from www.aviationbookcentre.com
Graeme Carruthers



THE SEXTON SP GUN IN CANADIAN SERVICE

Doug Knight



THE SEXTON SP GUN IN CANADIAN SERVICE

DOUG KNIGHT • SERVICE PUBLICATIONS • ISBN 1-894581-32-6

Published in 2006, this title from Service Publications has recently come into the office for review. In WWII the Army Technical Development Board sponsored more than 450 engineering projects in Canada. Only 35 of these ever entered production. One of the most successful was a Ram tank chassis mounting a 25pdr field gun which became known as the Sexton (the naming of British/Commonwealth self-propelled artillery often followed ecclesiastical nomenclature). The book's 24 pages contain a history of the vehicle from its inception in 1942 through to 1976 when it was still in service with the Portuguese Army. The authoritative text is supported by 21 B/W photos, together with several drawings including a centre page spread of scale drawings by George Bradford, well known for his range of AFV drawings and voted a founding-father of armour modelling by AMPS in 1999. The photos come from various sources and show the Sexton in the 'field', during trials and in transit. Mention is made of the 25pdr and the slight modifications that were required to fit it to the Ram chassis. Unfortunately there are no photos to show this fitting or indeed any other interior details. An overview of Canadian Sexton Regiments is provided giving the reader some useful information understand the Sexton's use in Italy and N-W Europe. Also of interest is a review by an unnamed commander of a Sexton regiment of the Sexton and its distant cousin, the 105mm M7 Priest.

In all the book is an informative read and of particular use to the modeller wishing to build a Sexton.

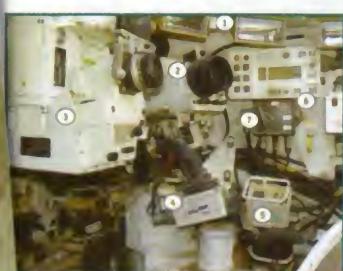
Available from www.servicepub.com
Keith Goldsworthy



MERKAVA SIMAN 3

MERKAVA MK 3 IN IDF SERVICE PART 1

IDF ARMOR SERIES
NO 2
DESERT EAGLE PUBLISHING
ILLUSTRATION BY THE LEGEND PRODUCTIONS



MERKAVA 3 IN IDF SERVICE PART 1

MICHAEL MASS • DESERT EAGLE PUBLICATIONS • SOFT BACK 78 PAGES

They say that good things come to those who wait and now that this very delayed book is here has it been worth the wait? Simply, yes. The book begins with a breakdown of the various Merkava versions and their often confusing Israeli names before going into the Mark 3 in some detail. Well captioned clear photos of the vehicle in action, and under maintenance are accompanied by many detail shots of the tanks exterior and, I believe a first, a series of images showing the turret interior.

The final part is a modelling section showing off the impressive new Legend Merkava 3 Baz kit, a model which the book's author told me is the most accurate Merkava ever made and as an officer in the Israeli Tank Corps and curator at Latrun Museum, you have to believe what he says.

All in all this book is a modeller's dream and should be never be far from your side when building a Merkava model.

Hopefully we won't have to wait as long for the next volume.

Very highly recommended

Available from www.friendshipmodels.com.

Graeme Carruthers



11038 • ENGLISH PUBLICATION • POLISH SUMMARY

SU-76



TOPSHOT 38

TOPSHOT 38 - SU-76

GRERORZ OKONSKI • KAGERO • ISBN 978-83-60445-55-6 • SOFT BACK 42 PAGES

Another welcome addition to the Topshot series of books, this great little book will complement the other book on the SU-76 that I reviewed a few months ago. Essentially a highly detailed walk around of a museum SU-76, the book covers the vehicle inside and out from all kinds of weird and wonderful angles. Highly recommended.

Available from www.aviationbookcentre.com

Graeme Carruthers





Book Reviews



TOPSHOT 40 - M35A2C

RYSZARD T KOMINEK • KAGERO • ISBN 978-83-60445-57-0

Another cracking volume from Kagero with the M35 6x6 truck getting the Topshot treatment this time. Within the 44 pages and 170 colour photos, all aspects of the vehicle are covered with the chassis and underside in particular receiving comprehensive treatment. There are, however, only two in-service shots (front and back cover), the remainder being of a preserved vehicle in Polish hands so finishes are restricted to these two. This is a minor niggle but as these books are aimed at providing detail, it doesn't really present any problems. Wear and tear, dirt, rust and fuel/oil stains are well illustrated in various photos even though the vehicle itself looks to be in something approaching a factory fresh finish. The AFV Club Cargo and Gun Truck kits will no doubt benefit from careful study of this volume.

As ever, these are outstanding books at a reasonable price and produced with the modeller in mind. Included in this particular offering is an A3 size poster with a repeat image of the truck on one side and an illustration of all of the Topshots on the other so you can start collecting those that you have missed!! Unreservedly recommended.

Available from www.bookworldws.com

Paul Egerton



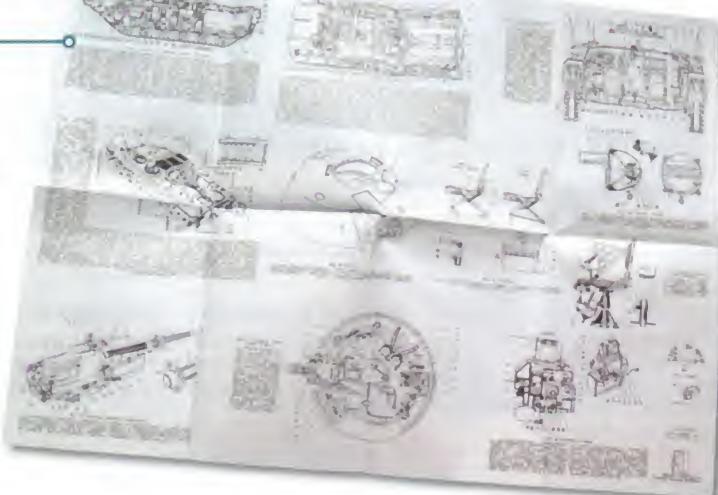
TOPSHOT 39 - BMP-1

MIROSŁAW ZIENTARZEWSKI • KAGERO • ISBN 978-83-60445-56-3

It is hard to believe that this is the 39th volume in Kagero's excellent Topshot series. The book follows the now well established format of 44 pages with over 170 colour photos and dual English and Polish captions. All aspects of the vehicle are well illustrated - interior, exterior and mechanics, and if that wasn't enough, a large sheet of technical drawings is included although the captions are in Polish only. I guess that the latter is a straight lift from the technical manual. I did notice some strange hues in one or two of the photos - purple seems to have crept in on pages 18 and 19 and there is an odd green colour on pages 26 and 27 but this in no way detracts from the subject detail.

This is another outstanding volume from Kagero and at a very affordable price. Invaluable if you are modelling the vehicle and a must for Soviet armour fans who must be increasing in numbers judging by what is now available for us. Available from www.bookworldws.com

Paul Egerton





Letters

WRITE TO: MMI Letters, ADH Publishing, Doolittle Mill, Doolittle Lane, Totternhoe, Bedfordshire, LU6 1QX, UK
Tel: 01525 222573 Fax: 01525 222574 Email: editor@modelmilitary.com
The views expressed are not necessarily those of the editor or publisher.
Letters may be edited for publication.

INSPIRED TO BUILD

As a reader of the magazine since Issue Two I thought it was about time I wrote to say what a great magazine MMI is, and to comment on some of the recent themes.

First on the elitist issue - I would agree with your Last Post of April 2007. I was skeptical when I first saw the magazine. I bought issue 2 for the Pink Panther article - I am a Land Rover nut - and was daunted by the extreme weathering and scratch building articles. However, the magazine produces a good range of tips and inspiration, eg; Mig's and your articles on building resin models. For example, in September's issue it was good to see the LWS, whose diorama has been receiving lots of comment on the internet recently. I have also been inspired to build a Holden Jeep using spares and some simple scratch building.

Secondly, on the inclusion of aeroplanes, etc. I agree and think that the occasional feature on aeroplanes, helicopter, and boats (amphibious vehicles), and perhaps landing craft should be included as there will be useful techniques and ideas that can be passed onto other areas of modelling. For example, the LWS appears to have been very much about creating an accurate model and placing it in a diorama. Keep up the good work.

Regards
Andrew Passmore (Exeter)

A THANK YOU

Thought I'd drop you a mail just to say the above.
I've just got back into model

making as a way of relaxing and trying to switch off from the PC/MAC support world. And I do believe that my stress level has come down some! Even if I just manage 30 or 60 minutes an evening, just the fact of sitting at my desk working slowly on a figure or part of a build section makes for a good end to the day and even better if I have a beer at the same time.

I have to say things have changed a lot since I last built a kit and I don't remember there being any or many magazines around, but that was in the days when Airfix was still going strong and you had the multicolored Matchbox kits to build. I'm very much into AFVs, figure building/painting and also racing cars, I found your magazine quite by accident while looking for another photography magazine so I bought it and went home, made a brew then sat down for a very very interesting read and I got loads of new ideas on modelling so that was very much for a great read, I enjoyed my read so much so I've taken out a subscription for this and your sister magazine Tamiya Model Mag Int.

So keep up the good work.

Kind regards
David via e-mail

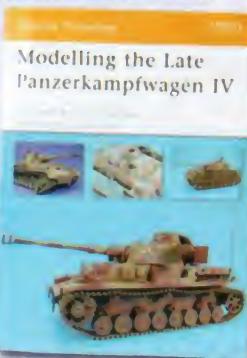
Ed says: Thanks for the kind words
David, I think you have hit the nail on the head, this is a hobby to be enjoyed and to help unwind and relax, which has to be a good thing. I hope you have found the articles and techniques of interest and that they have hopefully helped your modelling?

RECOMMENDED READING

MODELLING THE LATE PANZERKAMPFWAGEN IV

TOM COCKLE AND GARY EDMUNDSON
OSPREY MODELLING • WWW.OSPREYPUBLISHING

Just as we were going to print, the latest title in Osprey's excellent modelling series turned up. Produced by Tom and Gary guarantees this will be a very informative book with some superbly finished models, along with detailed descriptions of the builds and the techniques used, makes this a must have purchase for fans of German armour, or indeed anyone interested in modelling armour in general, who appreciate first class modelling.



MESSAGE FROM THE EDITOR

I certainly seemed to put the cat among the pigeons by featuring an aeroplane in MMI, and according to one reader "my reasons were not good enough!" I did feel it was more than fitting for this magazine and that's why it was reviewed and featured. John Wilkes included some useful techniques, which could prove useful to all modellers and not just aircraft builders. Well, like they say you can't please all the people all the time! I just hope he liked the five other vehicle articles in that issue?

See you again on November 1st!

Spud

John 'Spud' Murphy

KUBINKA

The tank museum, in Russia, exhibits the full range of WWII vehicles. However its website now has the following strange announcement. "The Russian military officials DO NOT LIKE the model makers (the regular violators of the museum rules)" and also announces The museum is the military subject and temporary closed for the foreign visitors till the special command." You may ask readers to offer a humorous explanation but I think the reasons are:

- 1) Having 2000 visitors count the number of rim bolts on their Panther G has driven the Museum staff "nutty".
- 2) The CIA has been caught disguising their agents as military modellers trying to take photos of the new Russian Black Prince,
- 3) The Museum is selling exclusive

photo and model reproduction rights to Zvezda, Alan, Alanger to promote communism!
Kind regards and thanks for the magazine's 'vegemite weathering' tech tip.

Matthew Ellard (Australia)

http://www.tankmuseum.ru/index_e.html (The announcement that the museum is closed is on the bottom of this page)
<http://www.tankmuseum.ru/inf.html> (The "we don't like model makers" is all over this page)

(PS Something odd is going on at the museum. It is a working military test ground and museum and should have GRU officers not FSB officers on security as described on the website. I guess only FSB officers can arrest citizens but it is odd).

RANDOM REFERENCE!

A CHIP TOO FAR

Although captured some 16 years ago during the first Gulf War, this T55 at the Bovington Tank Museum still retains its original paint and looks no different from the day it was brought back. Replicating a multi-layered chipped and flaked paint finish such as this would be a perfect use for the hairspray and salt techniques, used by Phil Stutckins on his Bergepanther in Issue 111 of our sister mag, TMMI. For more information about what's on at Bovington, including special events and the collection itself go to www.tankmuseum.co.uk





BACK TO SCHOOL

Andy Taylor returns to The Airbrush Company, this time to attend their 'Master Class' course hosted by Jay Laverty.

After my recent trip to Lancing, it was a more than pleasant surprise to hear that Jay Laverty has developed a couple of master-class courses currently being hosted by The Airbrush Company. The first covers the advanced use of the airbrush for paint techniques, and the second examines weathering and finishing effects. I therefore found myself on the way back to the south coast earlier than expected, in order to undertake a further two days polishing my skills using Iwata's superb range of equipment, ably guided by Jay's in-depth knowledge of his subject.

After rummaging through my stash, I decided to sacrifice an old Tamiya 1:35 Daimler Scout Car to the cause. I'd been hoarding it for years (it still bore the original price tag of £2.25 - that's how old it was!) in the hope of locating some etch for it that I'd never been able to lay my hands on. It's a cute little kit, and one I've always wanted to model with all the hatches open.

To make the model more suitable for purpose I decided to construct it closed up so I'd have no interior details to worry about. It took me all of fifteen minutes to stick it together as I wasn't bothered about construction finish niceties. I just wanted a good, solid, yet interesting little vehicle shape with enough angles, recesses, features and details that shading, highlighting and adding washes would bring out to the full. It not having tracks didn't matter. After all, wheels areas big a challenge to weather effectively as anything with pads or cleats.

The next day, after the mandatory stroll along Lancing's bracing shoreline I was greeted warmly by Jay at 'Airbrush HQ', introduced to my fellow modellers, and after a genial introduction to the course aims and its content (Jay produces a neat little info pack to go with each of the two days) I got right down to tackling the tasks.

First again, naturally, was surface preparation, and it was

There was plenty of 'hands on' practice trying out all the techniques covered during the two day course.



As you can see by Jay's attire and the student's slip-on shoes, everything is kept nice and informal making for a relaxed learning environment!

on with the Alclad primer. It was nice to get used to starting with this excellent product again which dried quickly to show up some surface flaws courtesy of my over generous and hasty use of cyano. Some deft work with the sanding/polishing sticks soon sorted those out, and a quick re-spray later I had a good primer base from which to start work.

Choice of paint medium is left up to the individual. I wanted to explore the use of acrylics more, and so worked with the Lifecolor range, whilst Jay happily stuck with his tried and tested application of enamels suitably thinned for purpose.

Jay's technique for paint finishes is a straightforward but highly effective one, based on a base coat, a darkened mix for shadows and recesses, and a lightened base coat mix for panel areas etc. In his hands it works extremely well. I followed Jay's lead, applied my chosen base colour, darkened the mix, applied this to the recesses etc, then lightened the mix and applied this to the panel areas of my Dingo. I stood back, admired my efforts and thought my little recce vehicle looked a complete...mess.

And then - a miracle!

Using the original base colour again, and with Jay knowing what the outcome would more than likely be, I misted on a fine coat of the base colour to blend the previous coats in and my scout car took on a new vastly improved appearance.

By now my little vehicle looked something like a reasonable job was being done on it. All during this time Jay patiently encouraged all those on the course to be bold with their approach, pointing out that if we didn't like the results it was always easy to rectify mistakes and there was no need to be so timid. A timid try will always look exactly like timidity as against subtlety.

Anyway, as the second day of the course was to cover weathering finishes and techniques, it was important that the finish I had so far worked on was sealed properly. I set about applying a coat of Future floor polish. It sprays, to my surprise, beautifully. I took my mini masterpiece and covered it with a sound application. It looked ruined. I was gutted. Completely, utterly, totally crest-fallen. I had a shiny, angular...thing...sat in front of me that looked as if all my hard work



Jay's enthusiasm and passion for the hobby really comes across during the course. Here students are listening intently to one of Jay's "when I was at band camp" stories!

had been in vain. Jay, however, to my bafflement, seemed rather pleased with it and said that all would come good. I set off for home and left my shimmering lump on the workbench for the next day, wondering if, by any chance, a second miracle would come along. Please

Day two arrived, and I was re-united with my glossy 1:35 object and Jay started to introduce us to some wash techniques. Washes need to be thin, very thin, and if you are using a white-spirit base for the medium you must use a good quality spirit, so avoid the temptation to buy the cheapest at the local DIY shop. A few minutes later using some good quality spirit, some oil paint for the pigment and a fine brush I had flooded the areas of details I wished to pick out (hatches, tie-down points etc.) and capillary action did the rest. Things were looking up. Dry-brushing and highlight techniques further enhanced the effect.

The question of decals next - how to apply, if best to use masks in preference (yes in my opinion, where possible) and will the progress of the print your own/make your own masks via the desk-top printer and internet

combo spell the end for decal manufacturers? Meanwhile, time to get my scout car muddy; time to play with garden dirt, diluted PVA, added oil paint and pigments for added colour depth. Simply mix together, apply liberally but intelligently and hey presto! - my recce car looked like it had been in the field.

Jay then introduced us to filters, pastels, CMK Star Dust and other active agents, plus Alclad clear lacquers and we got shown the delights of rust-streaks, oil spills, diesel stains and exhaust effects etc. I duly applied some, timidly, and my model looked OK, but I wasn't happy. To my eye, the Future had darkened and ruined the whole colour balance I was looking for in the finish I was striving to achieve. Jay asked us to spray on a matt varnish finishing/sealing coat. I was amazed, once the shine had gone off my efforts the whole model seemed restored, lightened and improved. It was actually worth showing to people.

So, in writing this, I didn't want to go into a minute blow-by-blow account of what we all did during the two days, as this rather seems to negate the point of encouraging people to attend such courses as those I've had the pleasure of attending at The Airbrush Company. And I do encourage people to attend. Courses such as these give confidence, aid the exchange of ideas and techniques (neither Jay nor Robin hide their trade secrets) and prove that

modelling has a social side for its fraternity should people so choose. Most importantly, attendees actually get to see their skills improve over a short space of time.

So, if you are looking for a way to tackle some of your painting/finishing blind spots, or just wish to see how some effective techniques skilfully applied can boost your modelling results and confidence, give attending a short course a serious think. It has worked wonders for me, and in my opinion is not only money enjoyably spent - it's a worthwhile investment too.

My thanks again to Alex and his colleagues at The Airbrush Company, and this time, especially to Jay for his patient and contagious enthusiasm added to expert guidance.

I like my little Dingo! Now, where's that Dragon Wagon?

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www.cammett.co.uk

"Washes need to be thin, very thin, and if you are using a white-spirit base for the medium you must use a good quality spirit..."



References - Sherman Details

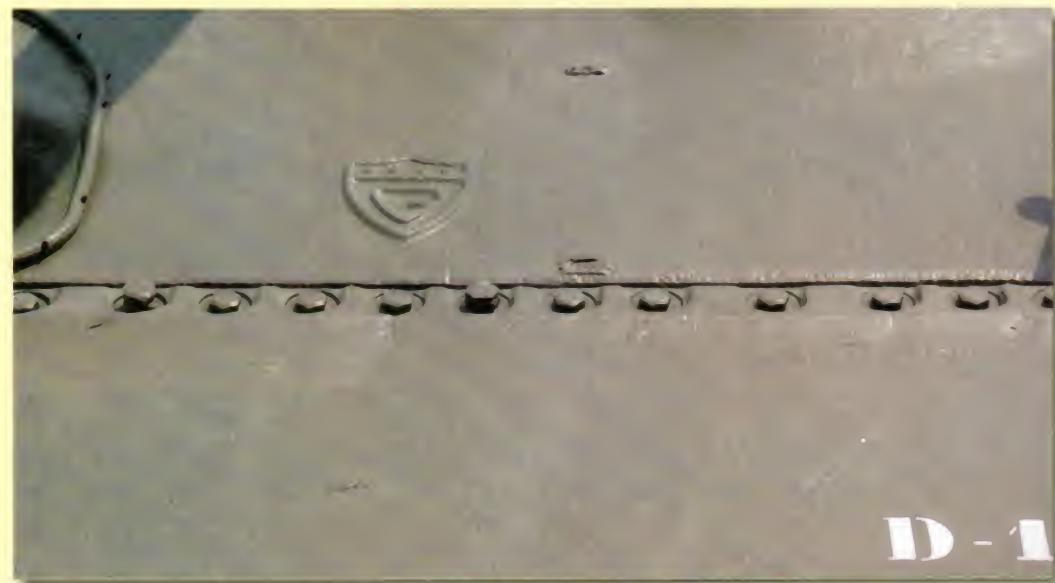
The Editor raids his photo collection, to share some useful reference details on the ubiquitous Sherman.



SHERMAN DETAILS

A subject close to my heart is the Sherman and so for this month's reference article I have chosen a selection of close-up detail shots of items such as casting numbers and the various styles of welds on the appliqué armour patches. With the introduction of Archer Fine Transfer's superb embossed resin decals featuring many of the foundry marks commonly seen on the Sherman (see this month's 'Incoming' section, page 58) I thought it would be an ideal time to share some of the hundreds of Sherman pictures I have amassed on my travels.

For more information on what all these marks stand for and just about anything else you could wish to know about the Sherman, check out The Sherman Register at <http://web.inter.nl.net/users/spoelstra/g104/>. ■



D - 1

▲ The foundry mark above the transmission housing denotes that this hull was cast by the General Steel Casting Corporation, Eddystone, Pennsylvania or Granite City Illinois.



◀ This turret was manufactured by the American Steel Armour plant, East Chicago, Indiana.

This transmission was produced by the American Foundries, Granite City plant. Note the popper studs used for attaching the waterproof cover over the bow machine-gun housing.



◀ Thanks to the angle of the sun, this close-up of the thickened cheek armour on this 75mm armed M4A1 turret reveals the unusual pimple effect of the cast texture.



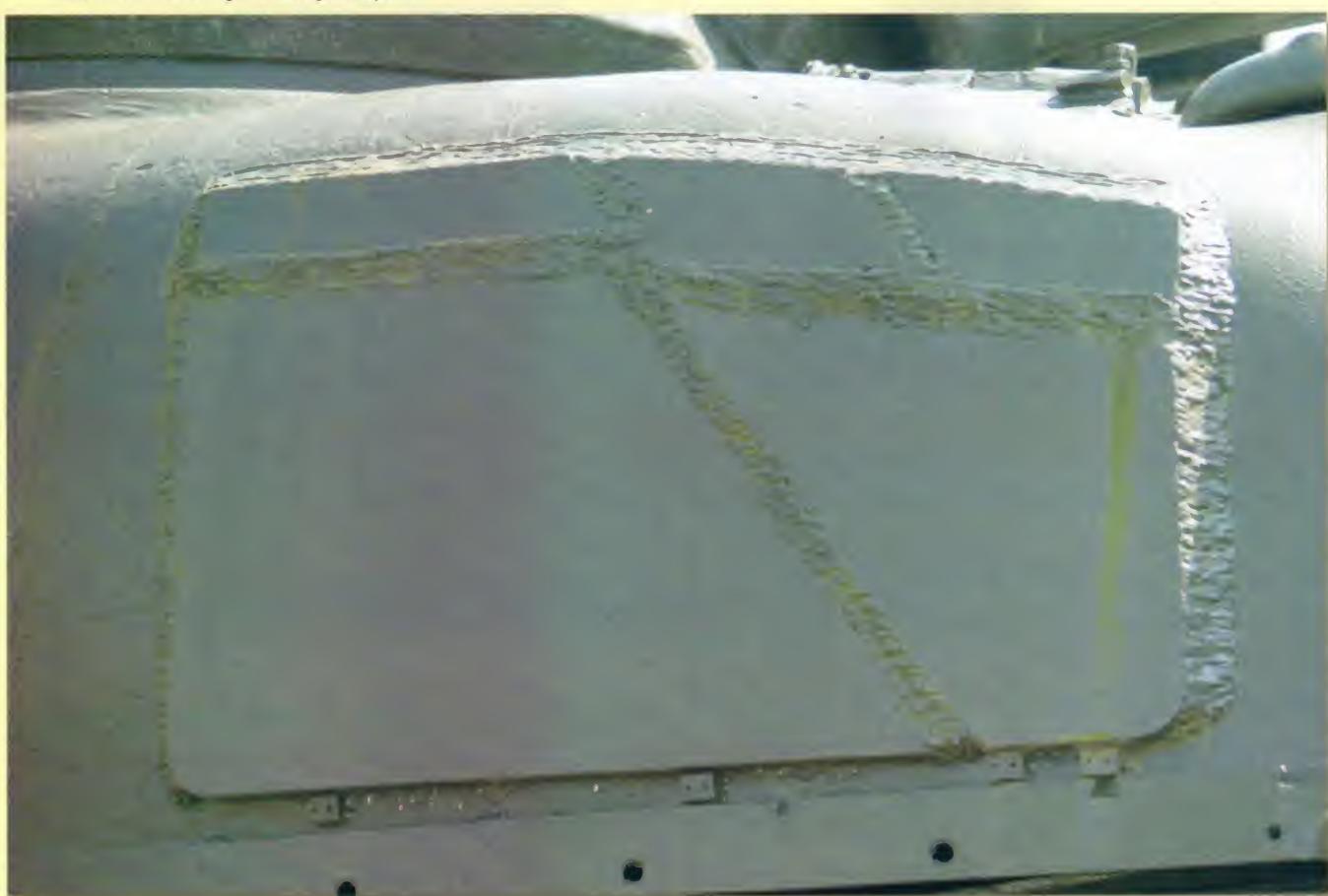
References - Sherman Details

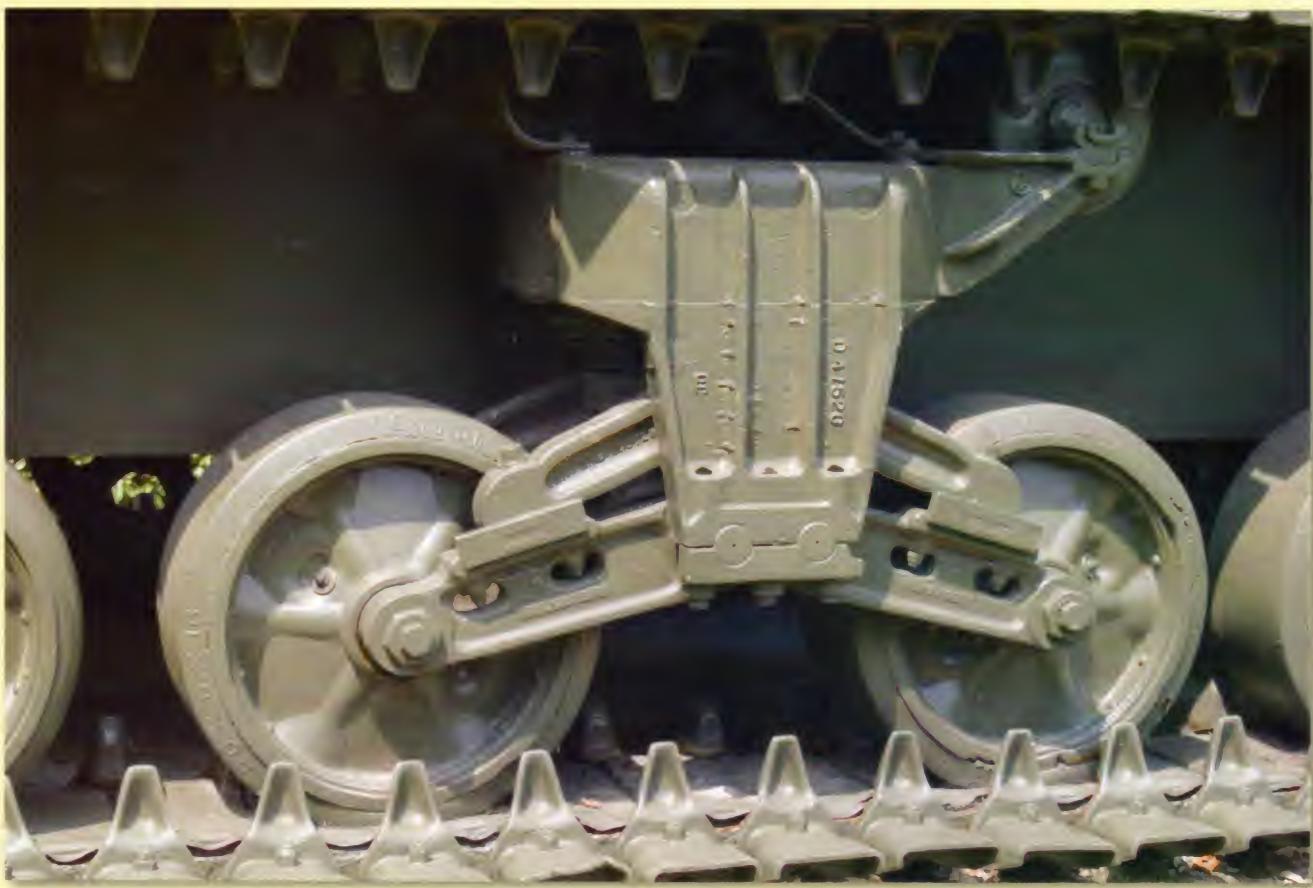


▲ The Granite City foundry mark on the lower side of the transmission housing has been partially ground away to make room for the skirt mounting of a Duplex Drive equipped vehicle.

▼ On this cast hull M4A1, the appliqué panel was made up from several pieces of steel due to the curve of the hull. Note that the hull does not extend along the lower edge of the plate.

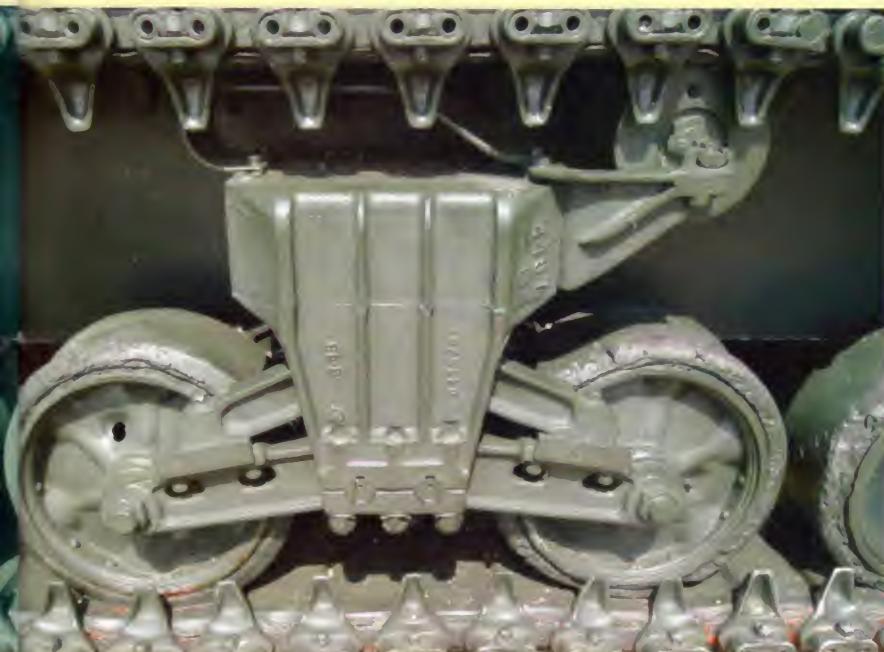
Close-up of the weld seam seen on the forward edge of an appliqué armour panel attached to the right hand hull side.





▲ Mid-production bogie fitted with pressed wheels. Note the rivets around the wheel rims and the extended end connectors.

This suspension unit is fitted with an earlier style skid plate. Note the three large bolts at the bottom of the unit, missing from all of the Tamiya 1:35 scale Shermans.



▲ Compare this unit to the one on the right. This unit is sitting much lower, possibly due to the volute springs sagging over time.





References - Sherman Details



▲ This applique patch has only received spot welds to hold it in place. Note also how smooth the glacis plate weld seam is.

▼ This double S foundry mark is unknown to the author. Note the six tie-downs and the drain hole at the base of the aerial mount housing.





MIG PRODUCTIONS

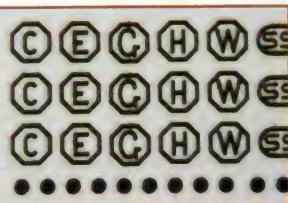
ABTEILUNG 502 OIL PAINTS

The latest colours to arrive from Mig Productions excellent Abteilung 502 range are Shadow Brown, Buff and Brick Red. These paints have been formulated with modellers in mind, and offer an excellent and ever-expanding range of shades that are perfect for painting and colour washes due to their fine pigment and 'creamy' texture.

These are my preferred choice of oil paint and I can unreservedly recommend them.

Available from www.migproductions.com and distributed in the UK by Creative Models.

10/10 - **The Editor**



ARCHER FINE TRANSFERS

SURFACE DETAIL SETS

SURFACE DETAILS NO.1 RIVETS/SCREWS. 008, 011,014 INCH DIAMETER AR88001

SURFACE DETAILS NO.2 US AND BRITISH DZEUS FASTENERS AND SCREWS 1:32 AND 1:48 SCALE AR88002

SURFACE DETAILS NO.3 ACCESS PANELS AND PIANO HINGES 1:32 AND 1:48 SCALE AR88003

SURFACE DETAIL NO.4 WWI STITCHING 1:32 AND 1:48 SCALE AR88004

SURFACE DETAIL NO.5 PERFECT WELD BEADS .015, .25, .030 AND .040 INCH WIDE AR88005

SURFACE DETAIL NO.6 ARC WELD BEADS .015, .25, .030 AND .040 INCH WIDE AR88006

SURFACE DETAIL NO.7 ARMOR CASTING SYMBOLS AND MARKINGS 1:72, 1:48, 1:35 SCALE AR88007

SURFACE DETAIL NO.8 TREADPLATE PATTERN AR88008

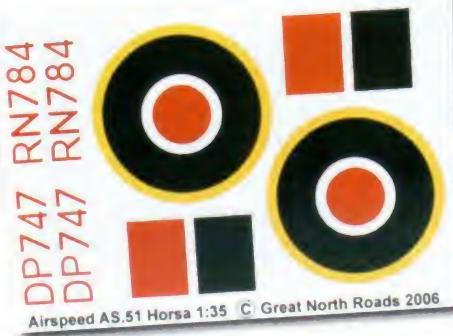
SURFACE DETAIL NO.9 LARGE FASTENER HEADS .035, .025 AND .015 INCH DIAMETER AR88009

I have personally tried out the casting symbol set and I must say they are absolutely excellent. They go on in exactly the same way standard waterslide decals, but they are five times thicker, meaning they really do standout from the surface they are applied to. A brilliantly simple idea, which will be most useful to armour and aircraft modellers alike. Top marks.

Available from www.archertransfers.com and www.historex-agents.com

10/10 - **The Editor**





GREAT NORTH ROADS

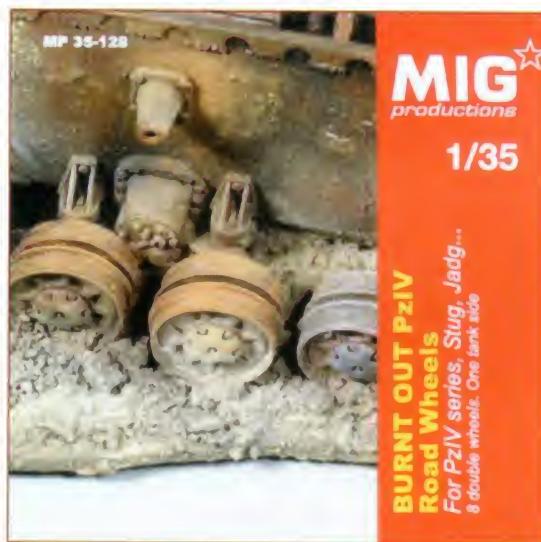
1:35 HORSA GLIDER TAIL SECTION

Following on from GNR's successful release of their complete 1:35 Horsa glider, the company have, by popular demand, made the tail section available as a separate kit. Cast entirely in cream-coloured resin and containing only nine parts, it will not take long to assemble, however some filling and sanding will be needed to get a perfect finish between the two halves of the fuselage and the tail assembly. A set of waterslide decals are supplied containing markings for two different aircraft, along with a simple set of A4 assembly instructions.

A great idea that will be the perfect accompaniment for Resicast's range of British airborne forces figures and Jeep conversions, and I'm sure it will create potential for some great dioramas.

Available from www.greatnorthroads.co.uk

8.5/10 - *The Editor*



MIG PRODUCTIONS

BURNT OUT PANZER IV ROAD WHEELS ITEM NO. 35-138

Taken from Mig Productions Knocked out Panzer IV kit, this complete set of burnt out wheels have been expertly produced in polyurethane resin. The wheels are very well detailed and even include the tiny tyre retaining ribbing. Apart from modelling a burnt out vehicle where all or most of the wheels have lost their tyres, these wheels could be used individually to replicate a vehicle that has shed some of its tyres, such as seen on the battered looking StuG IV photo posted on www.missing-lynx.com recently, which had lost several of its tyres whilst retreating from the Normandy front.

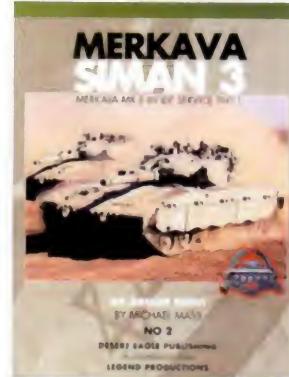
Available from www.migproductions.com and distributed in the UK by Creative Models.
10/10 - *The Editor*



Friendship Models

New Releases

Desert Eagle Publishing



IDF Armor Series No.2:

Merkava Siman Mk3 (Merkava Mk3 in IDF Service, Part 1).....£15.99

Legend Productions



LF1150: U.S. M2 Stowage.....£19.99

LF1149: Stug III Stowage.....£19.99

UK P+P: £30..£3.00, £31..£75..£4.00
£76..£150..£6.00, Over £150 Post Free
International Postage @ cost, please contact us directly in first instance.

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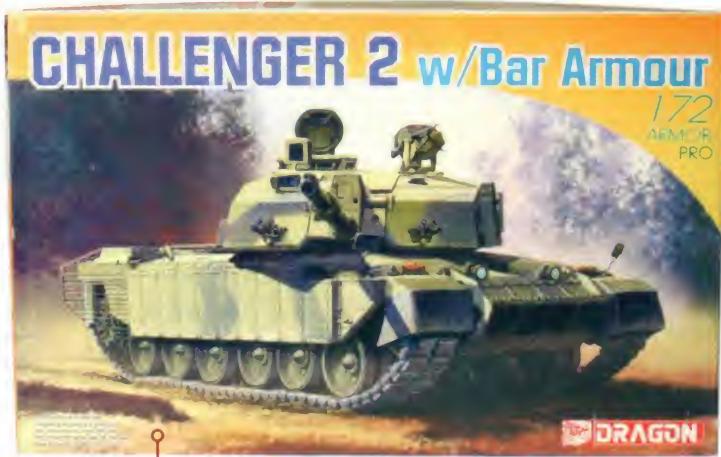
Ebay Shop

<http://stores.ebay.co.uk/Friendship-Models>

Visitors to premises by appointment only.



Incoming



DRAGON

1:72 CHALLENGER 2 W/BAR ARMOUR KIT NO 7287

Following on from their earlier releases of the Chally 2, Dragon have now given us what certainly has to be the best looking version with the extra armour panels and the metal bar armour surrounding the rear of the hull and turret. The bar armour is supplied on a large, delicate, wafer thin etch sheet meaning it is quite 2 dimensional but in this scale it would be very difficult to reproduce the form accurately and ultimately Dragon has made a pretty good job of it.

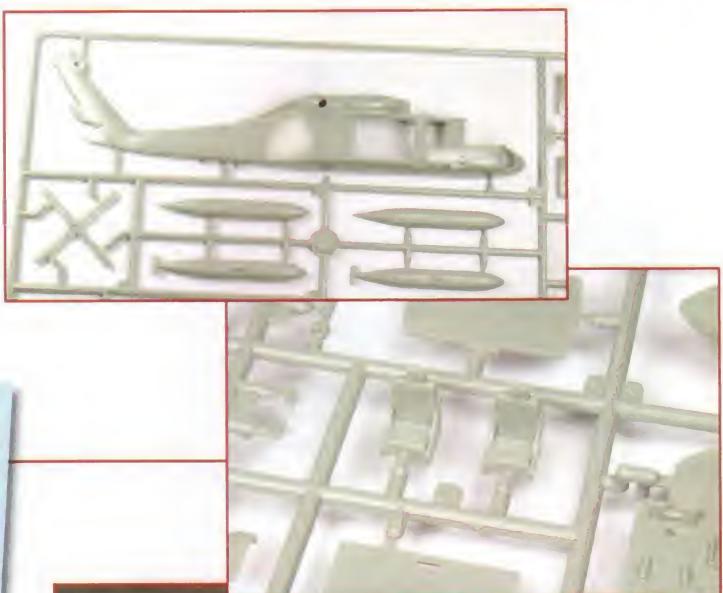
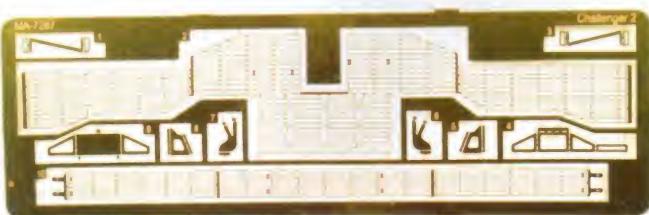
All the major parts of the kit fit together extremely well, mostly needing only the minimum of glue to hold them together. The tan coloured one piece DS tracks are also nicely detailed and fitted perfectly.

Unfortunately the instructions are in Dragon's older coloured photograph style and are not as clear as line drawings leading to some confusion in areas. Only one unexciting decal option is provided for a vehicle in Poland.

All in all this is a super looking, well produced kit with crisp details only let down by the instructions. Highly recommended.

Available from all good model shops

8/10 - Graeme Carruthers



HOBBY BOSS

1:72 UH60A BLACK HAWK ITEM NO 87216

Moulding is crisp and clean with finely engraved panel lines on the fuselage. A comprehensive interior is provided although there is neither a decal for nor raised detail on the instrument

panel but I'm sure that the after market boys will provide a painted etched brass offering probably with seat belts. The rotor assembly is nicely done, the smaller parts are finely executed and the transparencies are first rate.

The instructions are concise but make sure that you fit the engine exhausts and drill out the locating holes for the aerial before joining the fuselage halves.

Decals are provided for two aircraft – one from the 101st Airborne in olive drab and the other a Gulf War aircraft in sandy brown but the unit is not designated. A B/W markings and painting sheet is provided to enable finishing.

All in all, this is a very good model and well worth adding to any helicopter/modern aircraft collection. Highly recommended.

Imported and distributed in the UK by Creative Models

Available from all good model shops

8.5/10 - Paul Egerton



MIG PRODUCTIONS
1:48 RUSSIAN FARMHOUSE MP48-062
1:72 FLAT RAIL WAGON MP-351
1:72 CHECKPOINT MP72-352

It's good to see Mig Productions are catering for modellers of smaller scales with their latest releases. The first is a 1:48 Russian Farmhouse, which is not a full building, but rather a corner façade, designed to conveniently fill the corner of a diorama. No instructions are supplied with this building, but by studying the photo on the box top it will be straightforward enough to workout where the twenty two crisply cast resin parts go. The second two releases are a beautifully detailed flatbed railway wagon, and this one does come with a clear set of full colour instructions complete with photos of the inspirationally painted finished item. Last of all we have a very useful set of modern barriers and items associated with checkpoints, including Jersey barriers, posts, traffic cones, a guard hut and rising arm barrier. Another great set with so much diorama potential, and three very nice editions to the MP range, which I'm sure will be much appreciated by modellers of 1:72 and 1:48 scale subjects. Available from www.migproductions.com and distributed in the UK by Creative Models.

9.5/10 - The Editor



WWII AT/AA Bunker
 World War II
 6091 1:72
ITALERI

ITALERI

1:72 WWII GERMAN ANTI-TANK/ ANTI-AIRCRAFT BUNKER ITEM NO. 6091

Although designed with the wargamer in mind, this German WWII fortification will with some minor detailing and careful painting look really good on any appropriate diorama. Moulded in light grey plastic, the bunker consists of only 13 major components and a handful of ladder rungs and a hand. Although these smaller parts are finely moulded, it would best if they were replaced with brass or copper wire during construction. Italeri have also thoughtfully incorporated some battle damage, but I feel the detail looks too soft and the exposed re-enforcing bar is not well defined. But these minor points aside will be most welcome edition for war gamers, which this kit has been aimed at. Available from all good model shops

7.5/10 - The Editor



Released specifically to complement Dragon's own Marder III H, kit no. 6361, this set from Cyber Hobby, contains extra injection moulded parts, along with a new decal sheet and some replacement etched brass.

Firstly the plastic, in the shape of a new set of full-length fenders, these set out to correct the rib detail error from the kit's original left-hand fender. Unfortunately, the replaced portion is dimensionally different from the existing, with the ribs being both higher and wider, so it's debatable whether or not these parts are actually an improvement.

The etched brass consists of two pre-bent superstructure sides, which will give a much better scale thickness, but on the downside, the domed rivets that are nicely reproduced on the original plastic kit parts are nothing more than oversized flat spots on these new parts. Granted, they could be overlayed with more realistic rivets, but again, I'm left wondering if these new parts are really an improvement? Two-nil to the original kit, so far! The etched fret is better, including ammo racks, periscope hinges and all of the internal framework for the new superstructure.

Finally, a small decal sheet is supplied, with markings for three different vehicles, although there is no information as to where, or with whom, these vehicles served.

Available from www.cyber-hobby.com

5/10 - Darren Thompson



Next Issue

On sale November 1st 2007



STURMTASTIC

Kev Smith goes to town detailing Dragon's StuH42 10.5cm.



DUG IN DEFENDER

Mike Tooth describes how he built his latest diorama, this time, based around Skybow's 1:48 Late Tiger I.

FOR YOUR SAFETY

Don't forget, when using solvents such as glues, paints, thinners and cleaning agents, always ventilate your work area thoroughly and wear a face mask.

When using power tools, side cutters or any tool that can suddenly break or create high-speed airborne particles, wear approved eye protectors with hard, clear lenses. Please always model in safety!



A CLASS DEUCE AND A HALF

Luciano Rodriguez returns with another of his stunning 1:48 scale Tamiya kits, and here it's the 2.5 ton GMC truck.

...and much more!

Due to many influencing factors, we cannot guarantee the appearance of the above projects, but we'll try our best!

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The Last Post...

Techniques

BASIC MODEL PHOTOGRAPHY



This is a subject I get asked about a lot, and to be honest it could have a whole issue dedicated to it, but unfortunately we can't! However, very briefly, this is my home set-up:

- A digital SLR camera.
- A couple of cheap Anglepoise type desk lamps (Ikea etc.)
- Three energy saving low wattage bulbs
- A tripod
- A remote release adaptor (not essential)
- Close-up filters (not essential)

The camera is set on program mode with the ISO setting at 100. The camera is mounted on a tripod, which makes sure the image isn't affected by camera shake due to the long exposures when using these low wattage bulbs. The camera should be set to the smallest aperture (f22 or below). To get the sharpest photos, it is best to use the camera's own self-timer, or better still a remote release, so as not to disturb the camera at all during the moment of exposure. Obviously everyone's budget is different, as are the capabilities of individual cameras. It would be a good idea to dig out the instructions to check what your camera can do. ■



To take decent close-up shots it is essential to have the greatest depth of field possible, the No. 22 in the camera's LCD display is the aperture setting. The higher this number, the greater the depth of field i.e. how much of the model will be in focus from foreground to background. f4.5 would be no good, whereas f22 and above would be best.



These close-up lenses are really good for those extreme close-up detail shots. A lot of cameras come with a macro setting, so they aren't always essential, it all depends how close you want to get!



Remote release. With the set-up I use, a remote release is very handy, but they are quite expensive. A cheaper alternative is to use the camera's own self-timer. Because of the lighting system I use, the shutter speeds are very slow. It is essential not to disturb the camera by having to press the shutter release, which will blur the photo on a one or two second exposure.



I use these energy saving light bulbs, the main advantage being that they don't get hot, which is essential as I put a layer of tracing paper over the front of the lamps' shades, which helps to defuse the harsh light cast by these bulbs. Make sure the bulbs are from the same manufacturer as some makes produce a colour cast which can't be seen by the human eye, but the camera will pick it up.

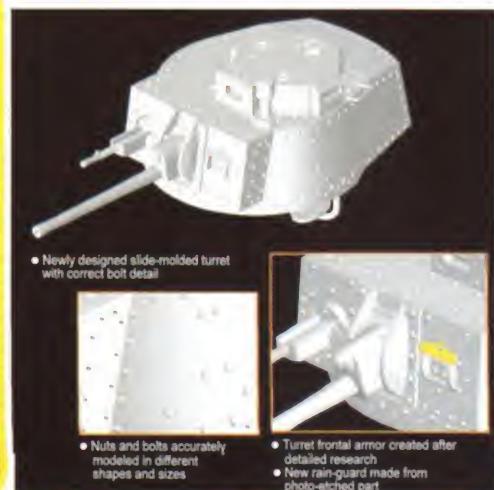


Ikea desk lamp. For best results, three are best: one directly above and the other two at 45 degrees from the front. Note the piece of duct tape on the centre of the tracing paper - this diffuses the hotspot (the bright spot in the centre) produced by the bulb's element.

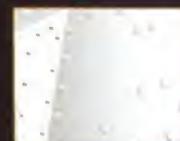
Pz.Kpfw.38(t) Ausf.G w/Interior



Engineered for modeling enjoyment
Plastic parts with enhanced detail
Unprecedented value
Ready for instant assembly

**DRAGON**

- Newly designed slide-molded turret with correct bolt detail



- Nut and bolts accurately modeled in different shapes and sizes
- Turned frontal armor created after detailed research
- New rain-guard made from photo-etched part



- Cupola hatch with improved details
- Cupola hinges correctly reproduced



- New one-piece slide-molded cupola
- Newly tooled cupola



- Fully equipped turret interior with gun assembly, basket and ammo case details



- Newly tooled 3.7cm main gun with authentic detail
- Finely detailed main gun mount is beautifully recreated with slide molds



- Vision ports with clear plastic parts
- Vision ports can be assembled open/closed
- Upper hull frontal armor is upgraded
- Driver's housing represented in fine detail



- Main gun and MG can be moved up and down



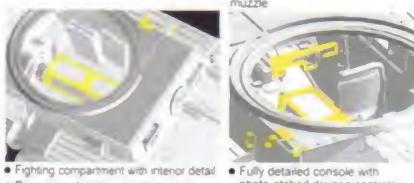
- Newly tooled upper hull made by slide molds



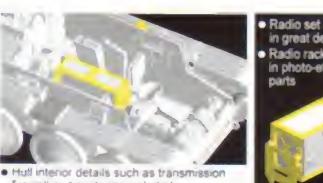
- Radio operator's hatch can be modeled open/closed



- New vision ports with interior detail are realistically recreated



- Fighting compartment with interior detail
- Driver's and radio operator's visor covers can be modeled open/closed



- Fully detailed console with photo-etched driver's controls
- Includes driver's controls
- Hull interior details such as transmission firewall and seats are included



- Radio set assembly modeled in great detail
- Radio rack recreated in photo-etched parts
- Newly tooled fuel tank with detail



- Completely new ventilation fan
- Two types of detailed periscope provided



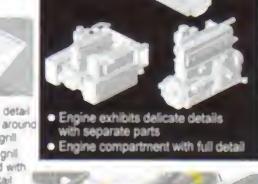
- Fenders improved to correctly represent natural sag with lateral slope
- Inspection hatch can be assembled open/closed
- Bolted front armor plates and glaçis are finely reproduced



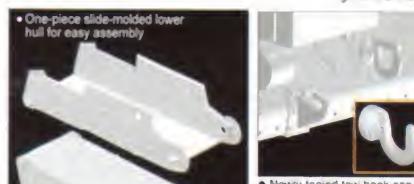
- Side opening access doors with slide-molded bolt details
- Rear compartment interior engine detail



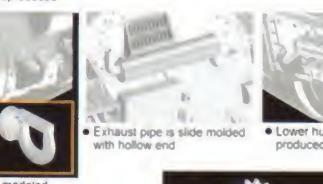
- Fully detailed engine deck is updated
- Fine bolt detail included around exhaust grill
- Exhaust grill reworked with great detail



- Engine exhibits delicate details with separate parts
- Engine compartment with full detail



- One-piece slide-molded lower hull for easy assembly



- Exhaust pipe is slide molded with hollow end



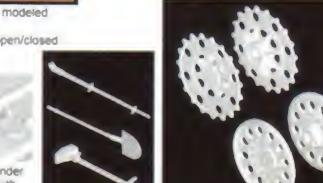
- Lower hull frontal armor produced with updated detail
- Finely detailed transmission system
- Jack and jack block repositioned on fender



- New OVM arrangement on fenders



- Lower hull bottom with accurate details
- Separate idler arms can be modeled in different positions
- Newly tooled tow hook can be modeled in closed position
- Tow hook can be assembled open/closed
- Rear panel has crisp details



- Prefabricated storage box is well produced from separate parts
- Fine fender detail with wing nuts
- On-vehicle tools



- Newly tooled suspension in full detail
- Bogie mounting plates reproduced by slide molds
- Easy to build suspension assemblies can be modeled in realistic positions



- Magic Track with casting number detail etched on every track link